Sri Lanka Dental Journal

Volume : 35
Number : 01
June : 2005

The Official Publication
of the Sri Lanka Dental Association

ISSN 1391-07280

HI-TECH DENTAL LABORATORY

The Pioneer Commercial Porcelain Laboratory

For all your Dental Laboratory Work :

- Porcelain crown & bridge work
- Orthodontics/ lingual arch bar, trans palatal arch
- Removable Orthodontic appliances
- Post crowns & Jacket crowns
- Metal Crowns in precious metal, semi precious metal
- Bridge work
- Maryland Bridges
- Chrome cobalt full and partial dentures
- Overdenturre abutments for Dental Implants

Sole Agent :

INNOVA CORP - CANADA

The endopore dental implant system endopore

T.P. ORTHODONTICS

IMTEC MINI DENTAL IMPLANTS

FOR DETAILS & PRICE LIST

DENTAL SERVICES CO. (PRIVATE) LTD.,

No. 141, Vauxhall Street,
Colombo - 2

Telephone : 2335175 , 2304185
Fax No : 2304186

Sri Lanka Dental Journal

Volume 35 Number 01 June 2005

University of Peradeniya
23 NOV 2010
Dental Library

The **Sri Lanka Dental Journal** is a refereed journal published biannually by the Sri Lanka Dental Association in collaboration with the College of Dentistry and Stomatology of Sri Lanka, College of General Dental Practitioners of Sri Lanka and the College of Community Dentistry of Sri Lnka.

Editorial Office

Office of the SLDA,
Professional Centre,
275/75, Bauddhaloka Mawatha,
Colombo - 7.

Correspondence regarding editorial matters, articles, reviews and news items should be addressed to the Editor, SLDJ, Dr. Gananda Nanayakkara, Dept. of Anatomy, Faculty of Medicine, University of Ruhuna, Galle.
Tele: 091 - 2234801

Correspondence regarding advertisements and financial matters should be addressed to Dr. Malcolm Stanislaus , 50, Hekitta Cross Road, Handala, Wattala.
Tele: 011 - 2930368

ISSN 1391 - 07280

©SRI LANKA DENTAL ASSOCIATION

Typeset & Printed by:

AK 2 PRO - Ethul Kotte, Kotte.
Tele: 011-2871899

CONTENTS

Sri Lanka Dental Journal

Volume 35 Number 01 June 2005

Editor

Gananda Nanayakkara

Assistant Editors

K. Krishnarasa

Harsha L de Silva

S.P.A.G. Ariyawardana

V.S. Weerasinghe

Finance Manager

Malcolm Stanislaus

Editorial Board

A.N.I. Ekanayaka

N.A.de S. Amaratunga

B.R.R.N.Mendis

M.T.M.Jiffry

M.S.Chandrasekara

Lilani Ekanayaka

Ajith W.Ranasinghe

Deepthi Nanayakkara

International Advisers

K.A.A.S.Warnakulasooriya (United Kingdom)

L.P.Samaranayaka (Hongkong)

D.Y.D. Samarawickkrama (United Kingdom)

Micheal Mars (United Kingdom)

David Davis (United Kingdom)

Brian Millar (United Kingdom)

Statistical adviser

R.O.Thatil

GUEST EDITORIAL

Making continuing professional development more accessible.

I am delighted to be writing in the Sri Lankan Dental journal about the opportunities offered at the Guy's, King's and St Thomas' Dental Institute of King's College London (GKT) for the further education of dentists. At GKT we are aware of the difficulties integrating further education with a busy life and general dental practice. Therefore, we have developed distance learning courses offering postgraduate education on-line which can be accessed and studied at a time to suit the dentist.

The on-line material is supplemented with hands-on courses and together these provide education leading to a masters degree, recognised by the General Dental Council (GDC) in the UK, and similarly in other countries, as an additional qualification. CPD is now mandatory in many countries and this course offers a means of acquiring documented hours of study towards Continuing Professional Development (CPD) requirements, as well as a higher degree. To further improve access, from 2006, we will be offering the residential components in two centres: London and India.

The Masters in Clinical Dentistry (MClinDent) in the subject of prosthodontics is now delivered on-line. This e-course is one of several distance learning courses offered by the University of London through King's College London which has been designed and is run by the staff at the Guy's, King's & St Thomas' Dental Institute.

The course seeks to address serious concerns about reductions in undergraduate training and the lack of training opportunities in postgraduate prosthodontic education[1,2]. This course increases the opportunity for clinicians, regardless of where they live, to undertake a degree in restorative dentistry while "no longer having to disrupt family commitments or

sacrifice practice income while studying for a masters degree at a recognised university" [3]. The programme is accessible "24/7" and the workload arranged so as to be compatible with busy schedules. This distance learning programme is popular with dentists who are busy juggling practice and family commitments as it is designed to be studied where and whenever the student chooses. The hours of study are flexible because of the on-line access to course information. Study is usually at home and can be fitted around other activities. References are usually available on-line and chat rooms, discussion groups and bulletin boards are open 24 hours a day. Assignments are submitted electronically and are returned with written comments from a UK-wide panel of experienced markers.

The course is designed for busy dentists who wish to extend their knowledge and update their clinical skills as well as gain CPD credits. The course takes the dentist beyond the level of the BDS degree, teaching the latest clinical techniques, improving job satisfaction through the acquisition of new skills and helping dentists who seek to move on to practice as a "dentist with special interest in prosthodontics". Year 1 covers *introduction to fixed and removable prosthodontics*, *treatment planning* and *complete dentures*. Year 2 covers *fixed prosthodontics*, *aetiology and management of tooth wear* and *biomaterials*. Year 3 deals with *advanced prosthodontics including implants*, *prosthodontic care for special need patients* and *statistics and epidemiology*. Short residential courses in 9-day periods, one in each of the first three years, provide the intensive hands-on training. These are aimed at reducing travelling time to make the course more accessible to dentists who do not live near London. In the fourth year a project is submitted based on a literature review or a small research project carried out in practice and a report is prepared under the guidance of a supervisor. Clinical work is carried out in the student's own practice with a portfolio similar to that for a conventional masters degree. Students graduate with a MClinDent (prosthodontics) from the University of London. For further details see www.londonexternal.ac.uk/postgraduate/kings/mclin_dent/ or contact m.clindent@kcl.ac.uk

This distance learning programme runs alongside our in-house programmes for those who would rather attend the GKT Dental Institute on a regular basis for part-time or full-time study leading to a Master's degree and specialisation in some cases. Whatever path you choose I wish you success in your continuing professional development.

Brian Millar BDS, FDSRCS, PhD
Course director of the MClinDent (prosthodontics) distance learning programme
Enquiries please to: **m.clindent@kcl.ac.uk**

1. Kapur K. Prosthodontics, a speciality at the crossroads since its inception. Int J Prosthodont 2001 14 397-8
2. Owall B. Prosthodontics in the third millennium. Int J Prosthodont 2002 15 517-8
3. Watson R. Continuing professional development with distance learning. Int J Prosthodont 2003 16 461-2

Brian Millar BDS, FDSRCS, PhD
Course Director of the MClinDent(Prosthodontics)
Distance Learning Programme
King's College London

Library,
Faculty of Dental Sciences,
University of Peradeniya.

Leading Article

Sri Lanka Dental Journal 2005; 35(01)3-16

Some Educational Initiatives Planned for Universities 2005/2006

B R R N Mendis
Oral Pathology, Faculty of Dental Sciences, University of Peradeniya

Introduction

All academic staff members in the field of Dental Education as well as Dental Professionals practicing Dentristry in Sri Lanka should take cognisance of the Lead Educational Initiatives that had been implemented, that are being implemented and are to be implemented in the future in the tertiary education sector of Sri Lanka particularly in the field of University Education. The contents of this leading article has been reviewed over time with the Minister of Education - Her Excellency the President Chandrika Bandaranaike Kumaratunge, Secretary, Ministry of Education, Dr. Tara de Mel, Secretary of the Treasury, Dr. P.B. Jayasundera, Members of the National Council for Economic Development (NCED) - Education Cluster and Councils, Senates and Faculty Boards of Universities. Further, some of these initiatives have been discussed with the National Education Commission (NEC) and also with the National Institute of Education (NIE).

The Vision of the Government of Sri Lanka

The vision of the Government of Sri Lanka is to modernise university education and to provide courses that produce graduates who are highly employable and competitive amongst their peers globally.

In the document prepared by the Secretary, Ministry of Education for a meeting in Geneva, Switzerland in September 2004 titled Investing In Our Future", the Secretary, Ministry of Education had this to say.

"Under the new government established after the elections held in April 2004 President Chandrika Bandaranaike Kumaratunga has kept the subject of education under her care. Her commitment to education development enabled the launch of the major education reforms programme in 1997. Now she intends to complete the mission that was embarked in 1997. Under her guidance and direction the aspirations of the parents to give their children an education that would equip them to face the challenges of the new century will be made a reality."

This vision of the Government is parallel to the vision of the University Grants Commission which is 'to develop a University System of the highest quality appropriate to national needs and aspirations, in keeping with global trends'.
In this short review article a few of the Educational Initiatives planned for Universities for 2005/2006 would be discussed.

1. A large majority of the eligible youth are deprived of Higher Education

Table 1: Students entry to Universities against the number who sat the G.C.E (A/L) Examination since 2000

Year of A/L Exam	Academic Year	(1) No. sat the GCE (A/L) Exam	(2) No. satisfying minimum requirements for	(3) No. selected	(4) No. selected As% of (1)	(5) No. selected As% of (2)
2000	2001/2002	214,189	91,676	12,132	5.7	13.2
2001	2002/2003	218,441	98,432	12,654	5.8	13.0
2002	2002/2003 (A)	210,141	92,252	13,036	6.2	14.1
2003	2003/2004	247,755	93,353	14,260	5.8	15.3
2004	**2004/2005**	**199,937**	**108,357**	**14,850**	**7.4**	**13.7**

If only the 2004 figures are looked at, it is seen that the number selected as a percentage of the number satisfying minimum requirements for admission to the Universities is 13.7%. The mean for 2000, 2001, 2002, 2003 and 2004 works out as 13.86%. It can thus be concluded that only around 14% of those eligible for admission to Universities gained admission to the Universities. In other words 86% of those who have secured minimum qualifications to enter a University in Sri Lanka are deprived of opportunities to satisfy their aspirations and those aspirations of their parents. This is a serious Human Resource problem for a country like Sri Lanka and must be addressed at all levels.

To summarize, Sri Lanka faces two very grave problems. They can be identified as Grave Problem No. 1 and Grave Problem No. 2.

Grave Problem No. 1

Students who satisfied minimum requirements for admission	108,357 -
No. admitted to Universities	14,850
No. qualified but not in a University	93,507

Table 6 : New Degree Programmes for 2005

Programme	University	Degree	No. of students
Pharmacy	Pdn, SJP, Jaffna	BSc	75
Medical Laboratory Technology	Pdn, Jaffna	BSc	35
Radiography	Pdn	BSc	35
Physiotherapy	Cmb, Pdn	BSc	60
Nursing	Pdn, Jaffna	BSc	80
Environment Conservation & Management	Kln	BSc	50
Facilities Management (Engineering)	Mrt	BSc	50
Transport & Logistics Management	Mrt	BSc	40
Molecular Biology & Biochemistry	Cmb	BSc	60
Industrial Statistics & Mathematical Finance	Cmb	BSc	60
Statistics & Operations Research	Pdn	BSc	50
Computation and Management	Pdn	BSc	50
Fisheries & Marine Sciences	Ruh	BSc	50
Islamic Studies & Arabic Language	SEUSL	BA	50

2. Improve the quality and relevance of University Education Degree Programmes

Quality is approached in the universities by many methods. The most important being the allocation of funding to universities from the IRQUE Project by means of Institutional Block Grants.

Table 7: Allocation of Block Grants to Universities (Rs.Mln.) as at 14.10.2004

Improving the Relevance and quality of Undergraduate Education

University	IT	English	Social Harmony	Student Learning Environ.	IT & English For Arts & Commerce	Increase Intake in ICT	Disabled Staff & Student	Total
	Allo.	Allo.	Allo.	Allo.	Allo.	Allo.	Allo.	Allo.
1 Colombo	7.20	7.50	8.60	8.85	20.00	10.00	5.00	67.15
2 Peradeniya	7.90	7.50	8.60	7.76	20.00	3.00	5.00	59.76
3 Sri J'pura	3.80	5.00	3.50	8.50	20.00	-	5.00	45.80
4 Kelaniya	7.20	10.00	8.60	9.50	20.00	5.00	5.00	65.30
5 Moratuwa	7.90	5.00	6.95	7.50	-	10.00	5.00	42.35
6 Jaffna	9.30	8.50	8.60	9.57	20.00	-	5.00	60.97
7 Ruhuna	7.20	10.00	8.60	10.16	20.00	-	5.00	60.96
8 Eastern	9.10	8.50	8.60	9.58	10.00	-	5.00	50.78
9 Sabaragamuwa	9.30	10.00	8.60	6.50	10.00	-	5.00	49.40
10 Rajarata	9.90	8.50	8.60	7.80	10.00	-	5.00	49.80
11 South Eastern	9.10	8.50	8.60	6.50	10.00	-	5.00	47.70
12 Wayamba	9.10	8.00	8.60	6.50	10.00	-	5.00	47.20
Total	97.00	97.00	96.45	98.72	170.00	28.00	60.00	647.17

It can be noted from Table 7 that all universities have got funding for components such as Information Technology (IT), English, Social Harmony, Development and Strengthening of student learning environment, the continuation of the IT and English Modules for Arts, Humanities, Social Science, Law, Commerce and Management studies, to provide facilities for disabled students, etc. the universities with the assistance of the Project Planning & Development Unit (PPDU) are continuously monitoring this aspect of the Project.

The IRQUE Project also is in the process of implementing a plan for Quality Assurance and Accreditation (QAA) from 2005-2009. This will be available for both public institutions and private institutions. Establishment of academic standards and qualifications framework, benchmarking subjects, institutional reviews and subject reviews are in the pipeline.

A competitive fund is also provided under the IRQUE project called "Quality Enhancement Fund (QEF)" which has already disbursed funds for 17 study programmes selected for funding over a 5 year period from among 102 study programmes. The details of the 17 programmes are shown in Table 8

Some Educational Initiatives Planned for Universities 2005/2006

Table 8:

Competitive Funding under Improving the Relevance and quality of Undergraduate Education (IRQUE) project. The Quality Enhancement Fund (QEF) - Grantees for Batch 1

University	Study Program	Amount	Institute
Colombo	Medicine	99,894,400	99,894,400
Peradeniya	Agriculture	97,829,000	
	Sociology	79,506,430	
	Vet. Science	85,040,800	262,376,230
Sri J'Pura	Medicine	89,900,000	89,900,000
Kelaniya	Biological Science	78,818,000	
	Buisness Management	93,934,000	172,752,000
Ruhuna	Medicine	92,716,993	
	Social Science	34,056,000	126,772,993
Jaffna	Medicine	90,027,000	90,027,000
Moratuwa	Chemical & Process Eng.	81,000,800	
	Earth Resources Eng.	94,953,100	
	Mechanical Eng.	86,623,600	262,577,500
Rajarata	Applied Science	93,582,000	93,582,000
Sabaragamuwa	Agriculture	73,991,000	73,991,000
South Eastern	Social Science	100,284,000	100,284,000
ICASL	Accountancy	100,316,905	100,316,905
Total		1,472,474,028	1,472,474,028

A total sum of Rs. 1,472,474,028/- (Rs. 1.472 billion) has been allocated to the universities for the improvement of quality.

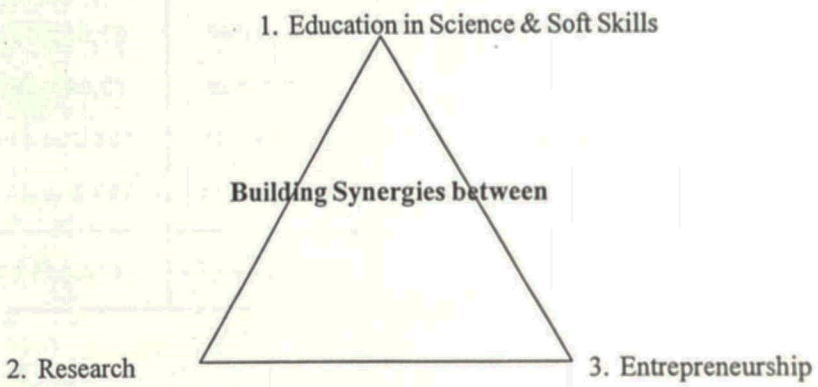
For the next round of the QEF 2006-2009, 59 study programmes are participating where 10 study programmes will be selected for the 4 year funding cycle with approximately Rs. 1,000 million to be allocated. This programme is well underway in the universities. All these quality enhancement methods are only for the conventional universities and not the Open University of Sri Lanka.

For the Open University there is a special Asian Development Bank (ADB) funded Distance Education Modernization Project (DEMP), which is a six year project, valued at US $ 60 million. The components of this project being

Project Cost	(USD Million)
Component 1. Distance Education Partnership Programme to raise Quality	16.90
Component 2. Public-Private Partnership to improve access	17.75
Component 3. Expanded OUSL capacity	18.00
Contingencies	7.35
Total US $	60.00

Improving quality and relevance of the university education degree programmes now also tie up with building synergies between education, research and entrepreneurship.

Figure 1: Building synergies between education, research and entrepreneurship



The Credit scheme for university courses has to be worked out with a total of 90 Credits for a 3 years degree programme and 120 Credits for a 4 year degree programme. In order to facilitate Credit Transfer for university students there should be common grouping for Credit values between different faculties and universities. As an example:

1 Credit = 15 contact hours
1 Credit = 30 – 45 laboratory hours
1 Credit = 10 lecture hours + 15 laboratory hours

In the Credit Scheme Credit has to be given for soft skills, for the research projects, for industrial training and also for field work.

The Credit for Soft Skills has to be worked out.

The Credit for Research Projects – 6-8 Credits as the maximum has to be agreed upon and Credit for Industrial Training (entrepreneurships) as 2 Credits for 1 month of Industrial Training and Credit for Field Work has to be finalised

Credit and Grade points should be made uniform for all universities.

Grade & Grade Points

(A&A+=4.0, A-=3.7, B+=3.3, B=3, B-=2.7, C+=2.3, C=2, D+=1.5, D=1.0, E=0)

The GPA Credit awarded may be calculated to the 2nd decimal point and a consensus has to be reached on the GPA cut off for classes. As an example:

GPA cut off for classes -	1st Class	3.75 or (3.50)
	2nd Upper	3.30
	2nd Lower	3.00
	Pass	2.00

At the present moment in time the Standing Committee on Science Education of the University Grants Commission under the chairmanship of Prof. M.A. Careem, Member of the UGC is working on these aspects of the Science Degree Programmes. Similar attention is needed for Commerce and Management degree programmes and also for the Arts Degree programmes.

3. Synchronization of Academic Terms in the Universities

In the years 1999, 2000, 2001 there have been several delays in the admissions of students to the Universities in Sri Lanka.

Table 9: Information on A/L Examination and Dates of commencement of University Courses

	1999	2000	2001	2002	2003	2004	2005
Date of A/L Examination	02.08.1999	31.07.2000	04.08.2001	22.04.2002	21.04.2003	03.05.2004	06.06.2005 – 01.07.2005
Release of A/L results by Examinations Department	15.12.1999	27.11.2000	24.11.2001	04.08.2002	08.08.2003	07.08.2004	08.09.2005
Release of cut off aggregates, average and cut offZ Score by University Grants Commission	05.05.2000	09.05.2001	13.05.2002	23.12.2002	21.11 2003	10.12 2004	20.12 2005
Date of commencement of University Courses			18.03.2003	18.03.2003	05.01.2004	20.12.2004 University of Jaffna Faculty of Medicine	27.12. 2005 University of Jaffna Faculty of Medicine

The UGC together with the Vice-Chancellors of the Universities and Deans of the Faculties have encouraged the concept same year admission of students to universities. For the 2004 G.C.E. (A/L) examination which was held on 3rd May 2004 and results released on 7th of August 2004. The cut off Z Scores were released by the UGC on 10th December 2004, the Universities were kindly requested to commence the academic terms on 20th December 2004 and the University of Jaffna Faculty of Medicine and University Ruhuna Faculty of Engineering commenced in 2004 itself.

The 2005 A/L examination commenced on 6th June 2005 and would be completed by 1st July 2005. Results would be released by the Department of Examinations on 8th September 2005 and the cut off Z scores would be released by the UGC on 20th December 2005. the Vice-Chancellors, Deans of Faculties and the Heads of Departments are requested to admit their students soon after 27th December 2005. The UGC together with the Universities are moving towards synchronization of academic terms and this ought to be finalised at least on or before Friday, 31st March 2006 in all Faculties in all Universities. The UGC is presently in the process of encouraging the Faculties to take in their students by Monday, 30th January 2006.

4. Improve the Quality of Delivery Mechanisms in Faculties

With the approaches to education and the environment of UNESCO in education development, Faculty Boards, Senates and Councils of Universities should explore aspects of Student Centered Learning, Activity Based Approaches, Computer Aided Learning (CAL) Laboratories, Language Laboratories and other aspects such as to conduct postgraduate degree in the English medium. Further Staff Training, use of Technology such as Multimedia is important and should be encouraged.

5. Poor level of Research Activities geared for economic development and the need for Staff Development

STRATEGIES FOR 2005

1. A stronger research promoting administration
2. Research training workshops for young academics
3. Selection of staff for local/foreign training
4. Linkages with local laboratories exhibiting excellence in research
5. Continuous annual assessment of research productivity
6. Award of direct funds for Departments based on PhD degrees produced by them
7. Human resource development through SAARC Fellowships & Chairs

The UGC has initiated a new development programme namely, the creation of the National Centre for the Advanced Studies in Humanities and Social Sciences (NCAS) with emphasis on staff development activities for 2005, 2006 and beyond for academic staff members in the fields of Arts, Humanities, Social Sciences, Law, Commerce & Management, Indigenous Medicine and Aesthetic Studies. A small fund was requested for and obtained from the Treasury to support PhD/MPhil programmes both locally as well as in Centres of Excellence in abroad.

NCAS supported PhD/MPhil Programmes

There were 220 applications forwarded by the academic staff of universities for the NCAS Ph.D/ M Phil. Programmes 2005. Approximately 60 completed applications were received by the deadline, out of which 29 applications have been evaluated.

Interviews have been scheduled to select priority candidates.

Further funds have been requested for this lead education staff development initiative from the 2006 budget.

6. Improve the Quality of Undergraduates by improving their "soft skills"

From the Far Eastern Economic Review, June 28th 2001 the search for soft skills was highlighted and the following was included.

"Instead of 'hard' skills like technical knowhow and tangible qualifications which are already abundant, employers say that 'soft' skills like common sense, an analytical and innovative mind, a global outlook, leadership and interpersonal skills including language, are rare and highly sought after in Hong Kong.

'Locals who can operate on a world stage are what we're looking for'."

By letter dated 23rd June 2003 the UGC requested the Vice-Chancellors to introduce the following course modules during the first semester of the first year. Some Senates and Councils of the Universities had discussions to conduct the introductory course module throughout the degree programme. The UGC suggested the following 8 areas. It will be desirable to introduce these areas into the time table so that the students take these modules seriously. As I mentioned in heading 2 above it can be desirable if credit can be given for the improvement of soft skills. The UGC identification of soft skills are as follows:

i. General English Language teaching
ii. Computer literacy and basic applications
iii. Communication skills
iv. Managements and entrepreneurial skills
v. Basic Science for non-science students
vi. Social studies for science students
vii. Introduction to Social Harmony and Sri Lankan studies
viii. Introduction to Career Guidance

7. Broad Basing the Scope of Education

The following improvements have been brought about to broad base the scope of education for our A/L students who enter the Universities.

For Arts Students

1. 3 Hard Technology subjects (2007 A/L)
   3 Soft Technology subjects (2007 A/L)
2. ICT Degree Programme (2004) – All 4 streams (from 2004 A/L)
3. Computation & Management new degree programme for 2005 (A/L)
4. Islamic Studies & Arabic Language (SEUSL) for 2005 (A/L)

For Bio Science Students

1. Pharmacy
2. Medical Laboratory Technology
3. Radiography
4. Physiotherapy
5. Nursing
6. Environment Conservation & Management
7. Molecular Biology & Biochemistry
8. Fisheries & Marine Sciences

For Physical Science Students

1. Transport & Logistics Management
2. Facilities Management
3. Statistics & Operations Research
4. Industrial Statistics & Mathematical Finance

We are now in the process of broad basing education for the Commerce & Management students. This will be done for the 2006 A/L examination

Noteworthy features of these programmes and those in Tables 4, 5 and 6 resulted in the introduction of a new Information and Communication Degree programme for students from the Arts Stream, Biological Science Stream, Physical Science Stream and Commerce and Management Streams. These programmes commenced in 2004

From the 2005 A/L an innovative joint degree programme between the Faculty of Arts, University of Peradeniya and the Faculty of Science, University of Peradeniya has commenced. The computation and Management degree would be offered by the Faculty of Science, University of Peradeniya for Bio Science and Arts students. The scope of education has been broadbased with subjects such as Medicine, Dental, Veterinary Science, Agriculture, Bio Science, Food and Nutrition, Applied Science, Unani Medicine, Ayurvedha Medicine, Food Science and Technology, Siddha Medicine, Information & Communication Technology, Nursing, Pharmacy, Medical Laboratory Technology, Radiography, Physiotherapy, Molecular Biology, Marine and Fisheries Biology etc.

For the Physical Science students the new courses available in addition to the existing courses would be Transport & Logistic Management, Facilities Management, Statistics and Operations Research and Industrial Statistics and Mathematical Finance among others introduced earlier.

8. Administration to be reformed urgently

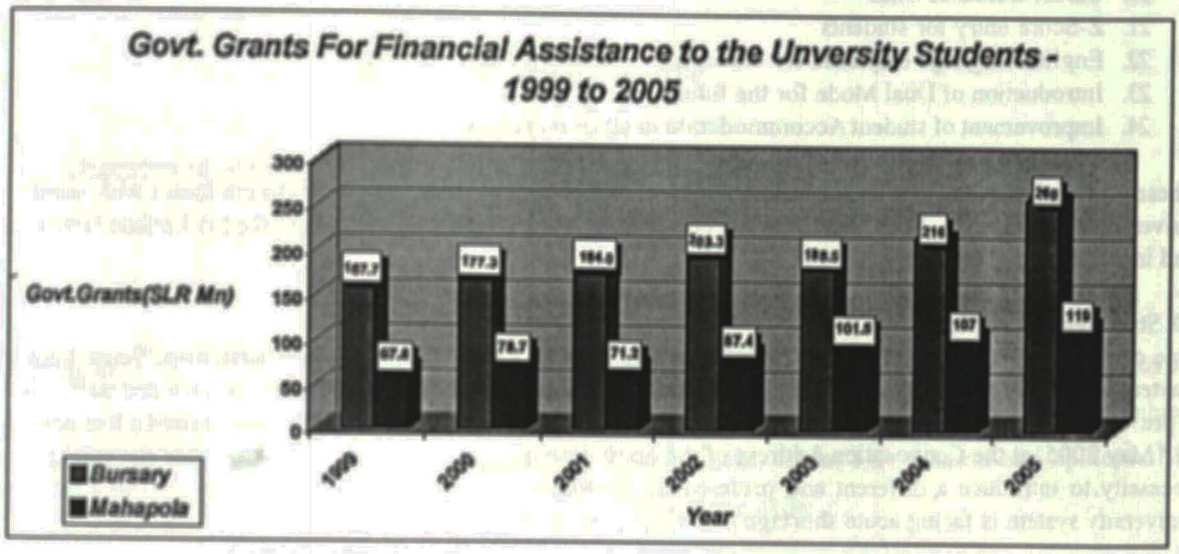
The UGC is working on this aspects trying to revise the Act No. 16 of 1978 and is also in the process of making and maintaining ways to achieve objective academic standards in higher educational institutions. The UGC intends to issue guidelines in preparation of job specifications and Job descriptions for each post.

Accordingly the UGC intends to make an ordinance to achieve the objective of maintaining academic standards in HEI. The UGC also intends to issue guidelines in preparation of job specifications & job descriptions for each post in order to demarcate the responsibility/duty of each academic / non academic employee.

9. Student Related Matters

For students Mahapola and Bursary Schemes have been increased over the years (Table 10 and Table 11).

Table 10: Mahapola & Bursary



	Payment before 2004	Payment increased in 2004
Mahapola Merit	Rs.1750/-	Rs. 2050/-
Mahapola Ordinary	Rs. 1700/-	Rs. 2000/-
Bursary Merit	Rs. 1450/-	Rs. 2000/-
Bursary Ordinary	Rs. 1350/-	Rs. 1900/-

Students were quite satisfied with both the Mahapola and Bursary increases. In addition improvements to the student learning environment has been made by way of the implementation of the following educational reforms.

1. Curriculum Reforms
2. Course Units and Modular system introduced
3. Continuous assessment
4. Synchronization of academic terms
5. Broadbasing of the curriculum
6. Emphasis in the time table of new & relevant areas
7. Introduction of General Medical Practice & General Dental Practice in the Curriculum
8. New demand oriented degree programmes
9. Improving university management & decentralization of administration
10. Preparation of corporate plans
11. Introduction of Open and Distance Learning Modules (ODL)
12. Improvement of External Degree Programmes
13. Accreditation and Quality Assurance
14. Financing

15. Research evaluation and performance evaluation of staff
16. Backlog clearance at all universities
17. Social Harmony
18. Creation of new courses
19. Strengthen labour market linkages
20. Career Guidance Units
21. Z-Score entry for students
22. English language emphasis for students
23. Introduction of Dual Mode for the future
24. Improvement of student Accommodation in all Universities.

These proposals are bound to improve the quality of degree rpgorammes making undergraduates who qualify from universities employable. It will also produce educated, trained, sensitive personnel to the Sri Lankan labour market and inculcate social harmony.

10. Staff Related Matters

One of the problems that the newer Universities such as Raja Rata, Wayamba, Sabaragamuwa, South Eastern and Eastern University are facing is the lack of trained staff and their inability to recruit and retain trained staff. The UGC is presently working on a suggestion made by Her Excellency the President, Chandrika Bandaranaike Kumaratunga on 31st May 2005, at the Convocation Address of the South Eastern University of Sri Lanka where she emphasised the necessity to introduce a different and preferential allowance system to university lecturers in Sri Lanka, as the University system is facing acute shortage of trained personnel.

Conclusion

Some Educational Initiatives planned for Universities 2005/2006 are documented to emphasise the need to address increase in enrolments, quality improvements and the need to admit students to the Universities soon after the release of the results. For the students, we have to improve delivery mechanisms, introduce 'soft-skills', and broad base the scope of education for employment. Finally, the higher education reforms must be implemented speedily in each and every Faculty. It will then be possible to produce employable graduates in Sri Lanka.

Review Article

Sri Lanka Dental Journal 2005; 35(01) 17-22

Recent advances in autoimmune blisters of the oral mucosa : Review

W M Tilakaratne

Department of Oral Pathology, Faculty of Dental Sciences, University of Peradeniya.

Introduction

Autoimmune blistering disorders are an uncommon, heterogeneous group of diseases that affect either skin or mucous membranes. It is not uncommon to find that some patients with the involvement of both the skin and the mucosa. Different diseases may vary in clinical presentation, clinical course, histopathology, immunopathology and management. Diagnosis of individual diseases should be accurate as the management varies from one disease to the other. In order to arrive at the correct diagnosis, the importance of clincopathological correlation cannot be under estimated. The role of dental surgeon in the diagnosis and management of this group of disorders needs to be stressed as oral manefestation may be the only presenting symptom in some patients. Autoimmune blisters develop as a result of autoantibody formation against various molecules of the squamous cell surface or epithelial/epidermal basement membrane zone and causing separation of kerationcytes or the epithelium from underlying connective tissue. There are numerous recent advances in classification, aetiopathogenesis and management of autoimmune blisters. This brief review presents the recent advances of pemphigus and its sub types, bullous pemphigoid, mucous membrane pemphigoid, linear IgA disease and epidermolysis bullosa acquisita.

Pemphigus

Pemphigus is a mucocutaneous disease characterized by formation of autoantibodies against various protein molecules of desmosome which maintains the attachment between adjacent epithelial cells.[1] Although pemphigus vulgaris (PV) is the commonest type, different subtypes have been identified, especially in the recent past with the help of new molecular biological techniques.[2] Pemphigus was a fatal disease before the invention of steroids. The incidence of PV varies between 0.42 to 1.62 cases per 100,000 with a predilection for Jews and people with Mediterranean descent.[3]

The new classification system of pemphigus mainly depends on the type of antibody identified and the target antigen molecule, against which the autoantibody reacts (Table 1).

Type	Immunoglobulin type (Ig)	Antigen
Pemphigus vulgaris – mucosal dominent	IgG	Dsg 3
Pemphigus vulgaris – Mucocutaneous type	IgG	Dsg 3 and Dsg 1
P. vegetans	IgG	Dsg 3 and Dsg 1
P. foliaceus	IgG	Dsg 1
P. erythematosus	IgG	Dsg 1
P. herpetiformis	IgG	Dsg 1
Drug induced	IgG	Heterogeneous
Paraneoplastic	IgG	Plectin,desmoplakin,BP 230, envoplakin, periplakin, Dsg3, Dsg1
IgA pemphigus – SPD	IgA	Dsc 1
IgA pemphigus – IEN	IgA	Unknown
IgG/ IgA pemphigus	IgG and IgA	Dsc 1-3
Endemic pemphigus (EP)– Brasilian type	IgG	Dsg 1
EP - Tunisian	IgG	Dsg 1, Dsg 3
EP - Colombian	IgG	Dsg 1

Table 1 - Classification of pemphigus

Although there are numerous sub types of pemphigus, oral mucosa is spared in some types. However the involvement of the oral mucosa is appeared to be common in p. vulgaris, p. vegetans and more importantly the recently described entity known as paraneoplastic pemphigus. In every sub type of pemphigus, different molecules of desmoglein (Dsg) family is affected by autoimmune process. There are three main desmoglein molecules present in the desmosome, namely Dsg I, Dsg 2 and Dsg 3 and the relationship of them to various subtypes are shown in table 1. The site of initial involvement in majority of patients with PV appear to be oral mucous membrane.[4] It is not unusual to see lesions in other mucosae such as cojunctiva and genitals. When lesions progress in to the skin, face trunk, back and axillae are the commonly affected sites.

Pemphigus vegetans is a rare variant and usually affect the tongue showing cerebriform appearance. The cutaneous lesions are usually seen in axillary areas and flexural areas.[5] The similarities of autoantigens present in pemphigus vegetans and pemphigus vulgaris have

led to the belief that former is a sub type of pemphigus vulgaris.[2]

Drug induced pemphigus is a sub type of pemphigus which is frequently induced by D- penicillamine. The other drugs which may be involved are captopril, phenacetin, furosemide, tiopronin, penicllins, progesterone and sulfones.[6] There is no substantial literature to show the involvement of autoimmunity in the disease process except a few case reports describing a probable role of Dsgs as the target antigen. Some reports contradict the former and suggest that the serum may react with an unknown antigen. These patients usually presents as an urticarial rash. Blisters start to appear few weeks after the rash and the disease may progress even after termination of the drug.[7]

Paraneoplastic pemphigus (PNP) is an autoimmune mucocutaneous disease frequently associated with lymphoproliferative disorders. The rare combination of the disease with other malignancies such as different types of carcinomas, sarcomas, melanoma and skin tumours has also been reported.[8] PNP was first described by Anhalt et al in 1990 and proposed a set of criteria in order to arrive at the diagnosis.[9] The proposed criteria which are valid upto date are (A) muocutaneous blistering and ulcerations, (B) Histopathological features such as acantholytic changes of the epithelium and epidermis with interface dermatitis, (C) deposition of IgG and C_3 in intercellular areas and/or along the basement membrane, (D) presence of serum antibodies and (E) demonstration of various desmoplkins and desmogleins in the serum. Most patients develop very severe oral ulceration and conjunctival ulceration with or without genital ulceration resembling the features of Steven's Johnson's syndrome or most severe forms of drug eruption. The possibility of PNP should be borne in mind when a patient presents with extensive oral ulceration if clinical, histopathological and the results of direct immunofluorescence are not pathognomonic for a specific diagnosis. The issue becomes even more important as some patients with PNP have no diagnosed malignancy at the time of presentation. Treatment of pemphigus consists of both local and systemic therapy.[10] The drug regimen is based on the sub type, age, severity and extent of the disease and the rate of progression. Seurm autoantibody titres seem to be a reliable guide to monitor the dose of drugs. Local treatment includes steroid application including creams and gels. In patients with progressive and non-responsive disease systemic treatment is necessary. The initial dose of prednisolone should be 40-60 mg/day. In addition, anti inflammatory and immunosuppressive drugs are recommended. Steroid sparing drugs can play a major role in elderly patients as they are more liable to develop side effects of steroids. This group includes dapsone (100mg/day), azathioprine (100-150mg/day) and cyclophosphamide (50-150mg/day). The most recent addition appears to be mycophenolate (2g/day).

Benign mucous membrane pemphigoid (Cicatricial pemphigoid)

Benign mucous membrane pemphigoid (BMMP) or cicatricial pemphigoid (CP) is a rare vesiculobullous autoimmune disorder characterized by formation of autoantibodies against the components within the basement membrane zone.[11] It has been reported to be diagnosed in 1 in 12000 to 1 in 20000 individuals. The disease shows a female predilection and it occurs at a mean age of 60 years. BMMP has recently been sub divided into different types based on the autoantibodies present.[7] The demonstrated antibodies up to date seem to be acting against Beta 4 intergrin, laminin 5, BPA 1 and BPA 2. These antibody titres appeared to be correlated with the disease activity.[12] The above theory has been accepted in the case of pemphigus over the years. Another important finding which has been emerged recently is the association between laminin 5 positive BMMP and cancer. The involvement of the oral mucosa is evident in 85% of the patients whilst conjunctival involvement is seen in 64% of the patients. The most common presentation in the oral cavity is found to be desquamative gingivitis. The disease process can extend to other mucosae such as nasal, oesophageal, laryngeal, tracheal, vaginal and anal. The involvement of skin is not a prominent feature in BMMP and the commonly affected areas are face, neck, scalp, axillae and extremities. It is mandatory to be extra cautious when it affects the conjunctiva as the disease process may lead to blindness due to extensive scarring in the absence of proper treatment at an early stage. In the clinical context, there are other blistering disorders which need to be considered in the differential diagnosis such as epidermolysis bullosa acquisita and linear IgA disease as scarring is a feature in those diseases as well.[10] However the histopathology and especially immunofluorecence (IF) are helpful to arrive at the definitive diagnosis. Histopathologically the features of BMMP may not be pathognomonic as several other sub-epithelial / sub-epidermal blistering disorders mimic similar features. Direct IF usually shows IgG and C3 positivity in the basement membrane zone. Minority of

patients may show IgM and IgA positivity together with IgG or rarely in isolation. As the autoantibodies bind to the epithelial / epidermal side of the basement membrane, salt split immunofluorescence is helpful in differentiating this disease from epidermolysis bullosa acquisita . Salt split IF creates a mechanical blister having epithelial and dermal sides to the blister. In BMMP, the target antigens are on the epithelial side and positivity should be noted accordingly. The treatment of BMMP usually depends on the severity of the disease.[13] The patients who have lesions restricted to oral cavity may be treated with local treatment such as topical steroids, intralesional steroid injections and cyclosporine topical applications. The patients with severe and extensive disease should be started with systemic treatment. As the initial treatment, dapsone has been found to be effective. Those patients who do not respond to the above drug should be considered for other treatment modalities such as, corticosteroids, methotrexate, chlorambucil, cyclophosphamide and azathioprine. The extreme cases have been treated successfully with a combination of high dose IV corticosteroids and cyclophosphamide. It has been shown recently that, those patients who fail to respond to multiple combinations of therapy to show improvement with intravenous immunoglobulin therapy. Surgical intervention may be indicated in patients with ocular, laryngeal and oesophageal involvement.

Bullous pemphigoid

Bullous pemphigoid (BP) is an autoimmune bullous disease predominantly affecting elderly people. The mean age of occurrence of the disease is 65 years. The autoantibodies are directed against BP antigen 1 and BP antigen 2 which are located in the basement membrane. Oral invovement of BP is rare when compared to BMMP, pemphigus and linear IgA disease. Approximately 24% of the patients develop oral lesions whilst 7% tend to show genital lesions.[14]

The initial presentation of BP in most patients is appeared to be pruritis and this figure may go up as high as 98%.[14] This is usually followed by urticarial eruption and formation of tense blisters. Some patients with BP may have other autoimmune disorders such as, diabetes mellitus, pernicious anaemia, lichen planus and psoriasis. Association of various malignancies has also been documented. It is important to note that some drugs are also associated with BP –like disease, namely NSAIDs (Brufen), captopril and penicilliamine.[15] The histopathology of BP is similar to other subepithelial blistering disorders and IF is mandatory in order to confirm the diagnosis. It is obvious that the majority of autoimmune blisters need IF or other investigations such as immunoblot assay to confirm the diagnosis. Direct IF should be performed on perilesional biopsy to achieve the optimal results. Although the autoantibodies against basement membrane can be demonstrated in about 70-80% of the patients, the disease severity may not be correlated with the level of antibody titre. However, recently it has been shown that there is a positive correlation of both BP Ag1 and BP Ag2 with the disease activity.[16]

The treatment of the disease is decided by the extent of the involvement similar to other autoimmune blisters. Localized lesions may be controlled with local preparations of steroids, but the progressive lesions should be treated with prednisolone and dose ranges from 20-80mg/day. Dapsone and other immuno-suppressive agents also play a role in treating unresponsive cases to conventional treatment.

Linear IgA disease

Linear IgA disease (LAD) is a chronic, acquired autoimmune sub-epithelial / sub-epidermal blistering disease. Although the disease is known as chronic bullous dermatosis of childhood, it may also occur in adults. When the disease is seen in adults the entity is called adult type linear IgA disease.

LAD is an important disease that the dental clinicians should be well aware of as oral manifestation is exceptionally a common feature. It becomes even more relevant as some patients present with only oral features at the beginning of the disease and very rare occasions the patient may have only oral features. Although oral lesions can appear at any site of the oral mucosa, some patients may present as desquamative gingivitis like in other diseases such as pemphigoid, pemphigus or lichen planus.[17] 70% of LAD patients appeared to have oral lesions.[18] Although the disease can occur at any age, childhood cases are common around 5 years and the adult cases occur in 4th and 5th decades.

LAD patients seem to produce autoantibodies against different components of the extracellular domain of the linking structures in the basement membrane. It is apparent that BP 180 glycoprotein is attacked by IgA autoantibodies in LAD in a similar way to that of pemphigoid.[18] The exact reason for the production of autoantibodies is still unknown, but it is believed that

the induction may be associated with external antigens such as viruses.

The skin lesions of LAD are very characteristic and show large blisters with small vesicles at the periphery. The above feature is known as "cluster of jewels" appearance. The oral lesions may not show the above feature consistently.

The definitive diagnosis of LAD should be arrived with the help of IF which shows a linear band of IgA at the basement membrane zone. This can be achieved by performing direct IF on perilesional tissue. C3 positivity is rare in LAD when compared with pemphigoid which is a main histopathological differential diagnosis. Presence of neutrophils in blisters may also help to differentiate this lesion from other histopathologically similar conditions such as dermatis herpetiformis and pemphigoid.

The mostly accepted treatment for LAD is dapsone, sulfapyridine and topical steroids. However for some patients anti inflammatory effects of antibiotics such as tetracyclines seem to be helpful. Recently the patients with LAD have been treated successfully with erythromycin, but the mode of action is unclear.[19] IVIG may have a role in managing progressive LAD.[20]

Epidermolysis bullosa acquisita

Epidermolysis bulosa acquisita (EBA) is a rare chronic autoimmune blistering disorder which affects the skin and mucous membranes.[21] Although the exact incidence and prevalence of the disease is unknown, one study reported it to be 0.25 cases per million.[21] Clinically, EBA is a heterogeneous disease and the mechanobullous variant , also referred to as classical EBA was first described in 1971. The blisters in this type are usually cell free blisters. Further this variant is similar to dystrophic type of epidermolysis bullosa hereditary type. Subsequently, inflammatory variant mimicking cicatricial pemphigoid, bullous pemphigoid and linear IgA disease have been described.[22] EBA is another disease characterized by formation of sub epithelial / sub epidermal blisters. However, the target antigens are not found directly inside the basement membrane like in pemphigoid or linear IgA disease. The target antigen in EBA has been confirmed as type VII collagen fibres which act as anchoring filaments between basement membrane and underlying connective tissue.

EBA may mimic diseases such as BBMP or LAD clinically, as all three conditions produce scarring with healing. The disease has been reported to be present with other diseases, including SLE, inflammatory bowel diseases, amyloidosis, mutiple myeloma, thyroiditis, diabetes mellitus and multiple endocrinopathy syndrome.[10]

The diagnosis of EBA cannot be achieved correctly with histopathology alone as other sub epithelial blistering disorders present the similar features. Direct IF on perilesional tissue shows a linear band of IgG at the basement membrane, but the similar findings are observed in pemphigoid. Therefore the most appropriate investigation is to perform salt-split IF to confirm the binding of antibodies to dermal side of the blister where type VII collagen is located.

The treatment of EBA is challenging and difficult. The various medications which have been tried, tend to provide temporary relief and recurrence of the disease seemed to be very frequent. Various anti-inflammatory (dapsone, phenitoin, gold and colchicines) and immunosuppressive agents (methotrexate, azathioprine, cyclophosphamide and cyclosporine) have been used in combination of systemic steroids or as monotherapy. The other treatment modalities which have been tried in the recent past include, plasmapheresis and IVIG.

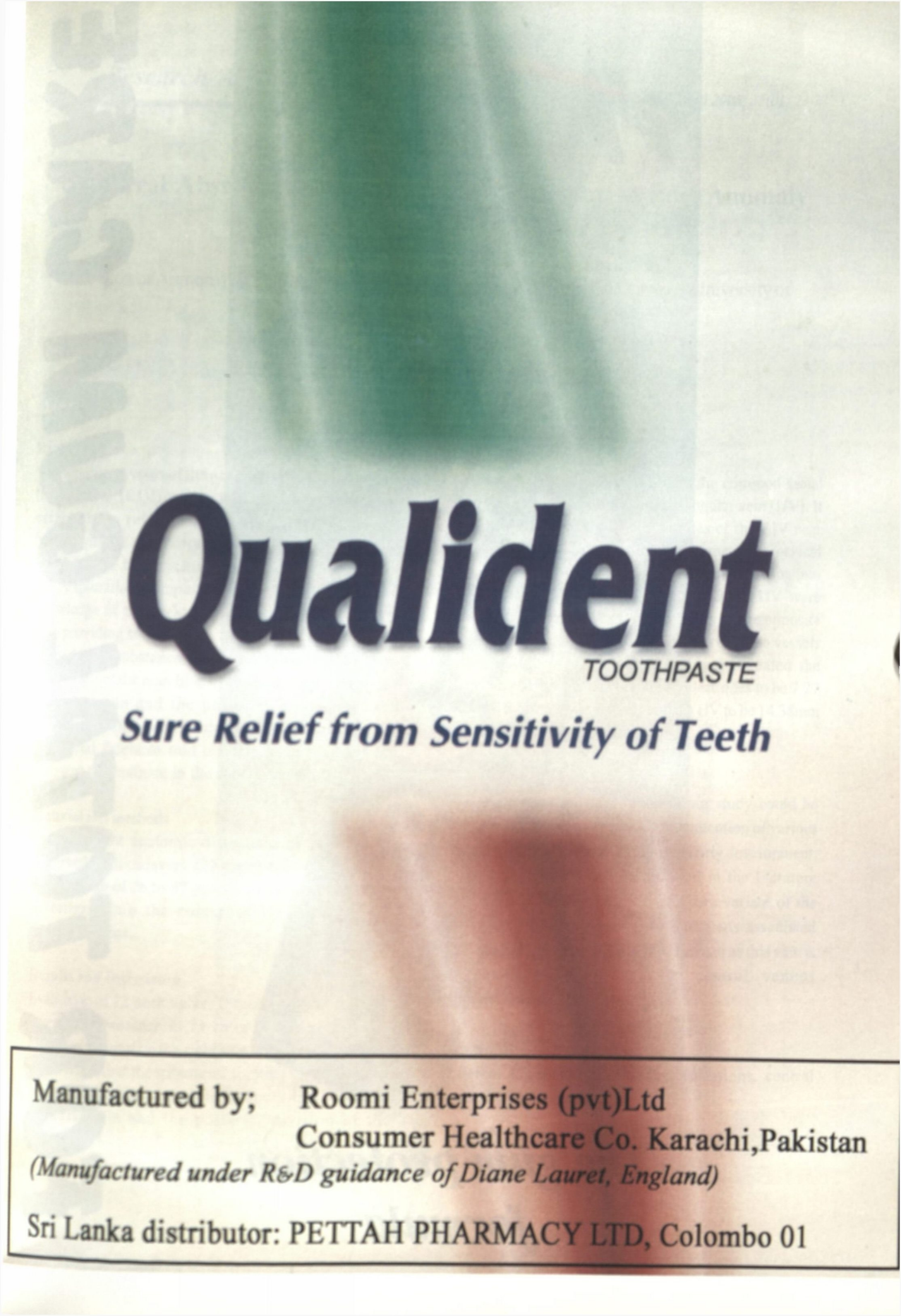
In summary, although the underlying immunopathology of autoimmune blistering disorders has been understood in detail, diagnostic difficulties are encountered in some cases. The reason for the above is clear, as some of the disorders present with similar clinical and histopathological features. The importance of correct diagnosis in this category of diseases cannot be underestimated as the treatment and outcome may vary from one disease to the other. Therefore, proper clinico-pathological correlation and appropriate investigations should be carried out in order to arrive at the definitive diagnosis. The role of dental surgeons in the diagnosis and management of autoimmune blistering disorders is critical as some of these disorders may present to them first or in rare cases the disease may restricted to the oral mucosa only.

References

1. Amagai M. Adhesion molecules: Keratinocyte – keratinocyte interactions; cadherins and pemphigus. J Invest Dermatol. 1995; 104 : 146-52.
2. Hashimoto T. recent advances in the study of the pathophysilogy of pemphigus. Arch Dermatol Res. 2003; 295 : S2-S11.

Library.
Faculty of Dental Sciences.
University of Peradeniya.

3. Pisant S, Sharav Y, Kaufman E, posner LN, Pemphigus vulgaris: incidence in Jews of different ethnic groups, according to age, sex and initial lesion. Oral Surg Oral Med Oral Pathol. 1974; 38 : 382-87.Ahmed AR. Clinical features of pemphigus. Clin Dermatol. 1983; 1 : 13- 21.
4. Becker BA, Gaspari AA. Pemphigus vulgaris and vegetans. Dermatol Clin. 1993; 11 : 429-452.
5. Brenner S, bialy-Golan A, Anhalt GJ. Recognition of pemphigus antigens in drug induced pemphigus vulgaris and pemphigus foliaceus. J Am Acad Dermatol. 1997; 36 : 919-923.
6. Yeh SW, Ahmed B, Sami N, Ahmed AR. Blistering disorders: diagnosis and treatment. Dermatologic therapy. 2003; 16 : 214-23.
7. Kaplan I, Hodak E, Ackerman L. Neoplasms associated with paraneoplastic pemphigus: A review of literature with emphasis on non-haematologic malignancy and oral manifestations. Oral oncology. 2004; 40: 553-562.
8. Anhalt GJ, Kim SC, Stanley JR. Paraneoplastic pemphigus. An autoimmune mucocutaneous disease associated with neoplasia. N. Engl.J.Med. 1990; 323 : 1729-35.
9. Scott JE, Ahmed AR. The blistering diseases. Med Clin Am. 1998; 82 : 1239-83.
10. Scully C, Carrozzo M, Gandolfo S, Puiatti P, Monteil R. Update on benign mucous membranr pemphigoid: a heterogeneous immune mediated sub epithelial blistering entity. Oral Surg Oral Med Oral Pathol Radiol Endo. 1999; 88 " 56-68.
11. Yeh SW, Usman AQ, Ahmed AR. Profile of autoantibody to basement Membrane zone proteins in patients with mucous membrane.
12. Chan LS, Ahmed AR, Anhalt GJ. The first international concensus on mucous membrane pemphigoid: definition, diagnostic criteria,pathogenic factors, medical treatment and prognostic indicators. Arch dermatol. 2002; 138: 370-379.
13. Kippes W, Schmidt E, Roth A. Immunopathologic changes in 115 patients with bullous pemphigoid. Hautarzt. 1999; 50 (12) : 886-72.
14. Yancey KB, Egan CA. Pemphigoid: clinical, histologic,immunopathologic and therapeutic considerations.JAMA. 2000; 284: 350-56.
15. Sami N, Ali S, Bhol K, Ahmed AR. Influence of IVIg on autoantibody titres to BP Ag 1 and BP Ag 2 in patients with bullous pemphigoid. JEur Acad Dermatol Venereal. 2004; 12: 245-51.
16. O'Regan E, Bane A, Flint S, Timon C, Toner M. Linear IgA disease presenting as desquamative gingivitis: a pattern poorly recognized in medicine. Arch Otolaryngol Head Neck Surg. 2004; 130 (4) : 469-72.
17. Eugia del Valle A, Agurre-Urizar JM. Oral manifestations caused by the linear IgA disease. Med Oral. 2004; 9: 39-44.
18. Cooper SM, Powel J, Wojnarowska F. Linear IgA disease: successful treatment with erythromycin. Clinical and Experimental Dermatology. 2002; 27: 677-79.
19. LetkoE, Bhol K, Foster CS, Ahmed AR. Linear IgA bullous disease limited to the eye: a diagnostic delimma: response to IVIG therapy. Opththalmology. 2000; 107: 1524-28.
20. Gammon WR, Briggaman RA, Woodley DT, Heald PW, Wheeler CE. Epidermolysis bullosa acqusita – a pemphigoid like disease. J Am Acad Dermatol. 1984; 11: 820-832.
21. Dahl MG, Epidermolysis bullosa acquisita: a sign of cicatricial pemphigoid? Br J Dermatol. 1979; 101: 475-84.



Manufactured by; Roomi Enterprises (pvt)Ltd
Consumer Healthcare Co. Karachi,Pakistan
(Manufactured under R&D guidance of Diane Lauret, England)

Sri Lanka distributor: PETTAH PHARMACY LTD, Colombo 01

The gum protection formula

FOR TOTAL GUM CARE

Research Article

Sri Lanka Dental Journal 2005; 35(01) 23-27

Unilateral Absence of the External Jugular Vein – A Rare Anomaly

T.N. Hewapathirana and C.D.Nanayakkara
Division of Anatomy, Department of Basic Sciences, Faculty of Dental Sciences, University of Peradeniya, Sri Lanka.

Abstract

Background
The superficial veins of the neck, especially the external jugular vein (EJV) are increasingly being used for establishing reliable central venous access for haemodynamic monitoring and long-term intravenous therapies. As these veins show numerous variations their exploration is important to gain a better anatomic knowledge of the neck. The EJV, the most important vein providing blood return from the face and scalp is formed in the substance of the parotid gland at the level of the angle of the mandible by the union of the posterior auricular vein and the posterior division of the retromandibular vein. It descends vertically in the superficial fascia to mid clavicle undercover of the platysma to terminate in the subclavian vein.

Material and methods
During student anatomic dissections of 36 formalin preserved adult cadavers (22 males and 14 females) in the age range of 26 to 87 years a study was initiated to investigate into the numerous variations of the superficial veins.

Results and Discussion
Evaluation of 72 neck halves for variations of the EJV revealed its presence in 71 cases (98.6%) but it was completely absent on the right side of one male cadaver. It was noted that the tributaries forming the EJV in the region of the parotid gland, namely the posterior auricular vein and the posterior division of the retromandibular vein were joining the common facial vein (FV) to drain into the internal jugular vein (IJV). It was also observed that the tributaries of the EJV near its termination, the suprascapular, transverse cervical and the anterior jugular veins were directly flowing into the subclavian vein. Both the FV and the IJV were unusually larger than their counterparts on the opposite side and the measurement of diameters of these vessels using a high precision digital caliper revealed the diameters of the FV on the right and left sides to be 7.27 mm and 5.59 mm respectively and the IJV to be 14.38mm and 8.38 mm respectively.

Conclusion
The anomalous patterns found in our study could be explained in terms of regression and retention of various parts of the fetal veins found during early development. As this anomaly is not documented in the literature previously it may be considered a rare variant of the EJV. A good knowledge of the variations associated with the EJV will be useful to the clinician as this vein is increasingly being used for central venous catheterization.

Key words
External jugular vein, absence, variations, central venous catheterization.

Introduction

The superficial veins of the neck, especially the external jugular vein (EJV) are increasingly being used for establishing reliable central venous access for haemodynamic monitoring and long-term intravenous therapies. As these veins show numerous variations their exploration is important to gain a better anatomic knowledge of the neck.

The external jugular vein (EJV) is the most important vein providing blood return from face and scalp. It is formed in the substance of the parotid gland at the level of the angle of the mandible from the union of the posterior division of the retromandibular vein and the posterior auricular veins. It descends vertically downwards in the superficial fascia from the angle of the mandible to the mid clavicle undercover of the platysma. It crosses the sternocleidomastoid to enter the subclavian triangle where it pierces the deep fascia to enter in majority of the cases the subclavian vein (SCV).[1,2,3] According to some investigators it may enter the jugulo-subclavian venous confluence[4,5,6] and its termination in the internal jugular vein (IJV) also has been documented.[7] The vein receives the occipital vein occasionally and, near its termination in the neck, the transverse cervical, suprascapular and anterior jugular veins drain into EJV.[1] It has two pairs of valves, the lower at its entrance to subclavian vein and the upper about 4 cm above the clavicle. The EJV varies in size and there appears to be an inverse correlation between the size of the external and internal jugular veins, thus the presence of a large EJV may be an indicator of a small IJV.[8]

The superficial veins, especially the external jugular vein, are increasingly being used for cannulation to establish reliable central venous access for diagnostic and therapeutic purposes

The present study was undertaken with the aim of investigating the common anatomical variations of the external jugular vein.

Material and methods

The study was carried out during anatomic dissections of thirty-six formalin preserved adult cadavers (22 males and 14 females) in the age range of 26 to 87 years, in the Division of Anatomy, Department of Basic Sciences, Faculty of Dental Sciences, University of Peradeniya, Sri Lanka, over a span of 3 years. The dissection of the EJV was performed according to the procedure described in Cunningham's Dissection Manual (Romanes 1986). The dissection was preceded to identify the termination and angulations of the EJV after retraction of the sternocleidomastoid muscle and resection of the clavicle A diagram was recorded for each dissection of the EJV.

Results

The absence of the EJV on the right side of a male cadaver is an unusual observation that we encountered in this study. In this case we observed the posterior auricular and retromandibular veins joining the common facial vein to drain into the internal jugular vein. It was also observed that suprascapular, transverse cervical and anterior jugular veins, which are tributaries of the external jugular vein near its termination in the neck, were opening directly into the subclavian vein (Figure 1). The internal jugular vein on the right side was unusually larger than the left one and the diameters of the right and left veins were 14.38 mm and 8.38 mm respectively (Figure 2). The right facial vein was larger than the left one and the diameters were 7.27 mm and 5.59 mm (Table 1).

Figure 1 - Venous drainage on the right side

A – Retromandibular vein (A_1), draining to facial vein (A_2), Common facial vein draining to internal jugular vein (A_3)

B – Transverse cervical vein (B_1), Suprascapular vein (B_2), Anterior jugular vein (B_3) joining subclavian vein

Figure 2 – Comparison of the diameters of left and right internal jugular vein

Table 1. Diameters of the Internal jugular and Facial veins

	Right side	Left side
Internal jugular vein	14.38 mm	8.38 mm
Facial vein	7.27 mm	5.59 mm

Discussion

The EJV develops from a tributary of the cephalic vein and anastomoses secondarily with the anterior facial vein. At this stage the cephalic vein forms a venous ring around the clavicle from which it is connected with the caudal part of the precardinal vein. The deep segment of the venous ring forms the subclavian vein and receives the definitive EJV. The superficial segment of the venous ring regresses but may persist in adult life [1]. Non-development or anomalous regression or retention of various fetal veins could be the reason for the absence of the EJV in the present study.

The internal jugular vein on the right side of this male cadaver was unusually large. This could be attributed to the additional venous blood it carries in the absence of the EJV, which drains greater part of the blood from the exterior of the cranium and the deep parts of the face. A size difference was also observed with respect to the common facial veins on the right and left sides. The veins forming the EJV in the parotid region, namely the posterior auricular vein and the posterior division of the retromandibular vein were draining into the common facial vein on the right side.

Perusal of literature reveals that the anomalous pattern observed in this study is not documented previously and it may be considered a rare variant of the EJV.

The external jugular vein is frequently being used to gain access to the central venous circulation although a variety of routes and techniques are available. Although this vessel does not provide a straight course to the right atrium, as does the SVC or IJV, the route has the advantage because of the relative ease in venepuncture. Also a corresponding artery does not accompany this vein and thus there is practically no risk of arterial puncture [9].

Although the safety is greater in CVP catheterization through EJV than SCV or IJV, the anatomical variations associated with it may pose difficulties. A good knowledge of these variations of the EJV will be invaluable to the clinician when using this vein for cannulation to gain access to the central venous circulation.

Acknowledgements

The authors express their thanks to Dr. J Batagalla and Mr. D.Ihalagedhara of Division of Anatomy, Dept. Of Basic Sciences, Faculty of Dental Sciences, University of Peradeniya for their assistance.

References

1. Gray H. Gray's Anatomy 37th ed. p 795 Longman London, 1989.
2. Snell R. Clinical Anatomy for Medical Sudents. Third ed. p 710 Little Brown and Company, Boston, 1986.
3. Romanes GJ. Cunningham's Manual of Practical Anatomy. 15th ed. p 24 Oxford Medical Publications 1986.
4. Sobotta J. Atlas of Human Anatomy 1. p 280-281. Urban and Schwarzenberg Munchen, 1982.
5. Kopuz C and Akan H. The importance of the angulation and termination of external jugular vein in central venous catheterization in newborns. Okajima Folia Anat Jpn 1996; 73(2-3): 155-9.
6. Deslaugiers B, Vaysse p, Combes JM. Contribution to the study of tributaries and termination of the external jugular vein. Surg Radiol Anat 1994; 16(2): 173-7.
7. Hollinshead WH. Anatomy for Surgeons. In : Hoeber (ed) Head and Neck p 484-486. Harper, New York 1954.
8. Stickle BR and McFarlane. Prediction of a small internal jugular vein by external jugular vein diameter. Anaesthesia 1997; 52(3): 220-2.
9. Blitt CD, Wright WA, Petty WC, Webster TA. Central venous catheterization via the external jugular vein – A technique employing the J-wire. JAMA 1974; 229 (7): 817- 818.

Yu and Company (Pte) Ltd.

We provide to dentist:

- *Quality products from reputed brands*
- *Reasonable pricing*
- *Dental equipment & supplies*
- *Orthodontic Material*
- *Unmatched caring and courteous after sales service*
- *6 days a week customer support by manufacture trained*
- *Availability of original spare parts for all equipment supplied by us*
- *One stop shop all dental requirements*
- *We take responsibility, and provide reliability & assurance in all what we do*

Contact: yu and Company (Pte) Limited
198 Cotta Road,
Colombo 8.
Tel: 2691740, 4618469
Fax: 94-11-2687463 Email:ty and co@wow.lk

Opening Hours: Weekdays 9.00 a.m. - 5.00 p.m, Saturdays 9.00 a.m. - 1.00 p.m.

Case Report

Sri Lanka Dental Journal 2005; 35(01) 28-32

SIALO-ODONTOGENIC CYST WITH HYALINE BODIES

K A N Jayasinghe[1], R M S K Rajapakse[2], W M Thilakaratne[1]

[a]Department of Oral Pathology, Faculty of Dental Sciences, University of Peradeniya, Peradeniya.

[b]Oral and Maxillofacial Unit, Teaching Hospital, Kandy.

Abstracat

Sialo-odontogenic cyst (SOC) also known as glandular odontogenic cyst (GOC), is a rare developmental cyst described recently. Very few cases have been published in literature up to now, and only a single case with hyaline bodies. The patient was a 53 years old male and the cyst has appeared as a hard swelling in relation to mandibular 654\ region. The lesion has not regressed even after extraction of the relevant teeth. It was enucleated later suspecting a residual cyst. GOC usually appears as a large painless swelling over the anterior mandible.

Histopathology plays a vital role in its diagnosis, as it closely resembles low-grade central mucoepidermoid carcinoma. Treatment is still controversial, but thep rognosis appears to be good with complete enucleation.

Case Report

A 53 years old male patient presented with the complaint of a gradually enlarging swelling in mandibular 654\ region for about 6 months duration. Extraction of 654\ has been done 2 months ago due to the swelling, but the swelling has not regressed. Past medical history was not contributory. The patient appeared well otherwise.

On examination it was a hard swelling of 2 cm x 1 cm size over the left side mandible. The swelling was evident both extra orally and intra orally. There were no inflammatory signs associated.

Radiological investigations showed a well-defined radiolucency (fig. 1). The lesion was enucleated and sent for histopathological investigation, suspecting a residual cyst.

Histopathological examination showed a cystic lesion lined by folded nonkeratinized stratified squamous epithelium forming epithelial plaques. Mucous secreting cells were present in the epithelium. Numerous hyaline bodies were also observed inside the lumen. Considering the histopathological features the lesion was diagnosed as a sialo-odontogenic cyst (SOC) / glandular odontogenic cyst (GOC).

Discussion

GOC is a rare newly classified variety of developmental cyst, first described in 1987 by Gardner et al. The WHO has established GOC as a separate entity only in 1992, however its relation to botryoid odontogenic cyst (BOC) and lateral periodontal cyst (LPC) is still a topic of discussion.

Aetiology and Pathogenesis

The morphology of the epithelium in GOC strongly suggests an odontogenic origin or differentiation [1]. Further support for the concept of the odontogenic nature of the cyst is lent by the occurance of hyaline bodies as seen in the present case, even though the occurrence of hyaline bodies are controversial (fig 2). Haematogenous and odontogenic origin has been proposed. Hyaline bodies are characterised by a hairpin or slightly curved shape, concentric lamination, and they

tend to be predominantly eosinophilic. They can act as foci for dystrophic calcification showing basophilic changes. Also there are other GOC cases reported in connection with odontogenic tumours, such as ameloblastoma, dentigerous cyst etc.

The histogenesis of the lesion remains unclear. Initially intraosseus salivary gland origin was suggested, but the histopathological features in the epithelium advocated an odontogenic origin. The characteristic epithelial plaques seen in GOC are formed by localized proliferation and swelling of basal cells. That is a process, which tends to occur in reduced enamel epithelium, and that seems to mimic early stages of odontogenesis where the thickening of the primitive oral ectoderm forms the dental lamina [1,5].

Epidemiology and Clinical Features

GOC is exceedingly rare. Up to now very limited number of cases has been reported in literature, with only one case associated with hyaline bodies.[5] GOC can occur intraosseusly in either jaw, with a predilection for the anterior mandible.[2] Most of the literature shows that middle age men (mean age 50 years) are commonly affected,[4] but in a literature survey done by Koppang et al. the female to male ratio was 28:19.

Usually GOC presents as a slow growing painless swelling. Not infrequently, they are large swellings involving 5 or more teeth.[7] It may cause pain or paresthesia due to compression of a neurovascular bundle. Inflammation is a rare feature. In spite of its benign nature, it is thought to have a potentially aggressive behaviour with bone perforation, erosion of cortical plates, root resorption and tooth displacement.[2,6]

Differential Diagnosis

GOC has a very close resemblance to both lateral periodontal cyst (LPC) and botryoid odontogenic cyst (BOC). BOC is the multilocular variant of lateral periodontal cyst, which is a developmental cyst arising from the epithelial rests of the periodontal ligament. The cyst lining is a nonkeratinised-stratified squamous epithelium with epithelial plaques as seen in GOC. But the GOC has additional characteristic features of presence of mucous cells, crypts and cysts within the epithelium and superficial cuboidal or columnar cells.

It has been stated that mucoepidermoid carcinoma is the most common salivary gland tumour found in an intraosseous location [5,8]. Further, a vast majority of central mucoepidermoid carcinomas of the jaws has been low-grade predominantly cystic lesions. Low-grade central mucoepidermid carcinoma very closely resembles a GOC, due to the presence of mucous cells within the epithelium. Therefore it is recommended to examine multiple sections of the lesion to differentiate these two lesions, as they can be very identical in some sections.

Special Investigations

Multiple plane radiographs are usually recommended for diagnosis of extensions with CT reserved for large lesions. Radiologically most lesions are unilocular (52%) and others are multilocular (48%). 94.5% lesions were reported to have well defined borders while the few others have a sclerotic or scalloped margins[2].

Vitality testing of the adjacent teeth will show a positive response usually, but due to nerve compression some cases can show a negative response that will entail endodontic therapy.

Fine needle aspiration will show a water clear low viscosity fluid that will be shown in typical GOC. Electrophoresis and cytological examination have also been used in some cases, but the presence of cholesterol crystals and microorganisms due to secondary infection may reduce the validity of such tests.

Excisional biopsy is confirmatory. Microscopy will show a cystic lesion lined by nonkeratinized stratified squamous epithelium with epithelial plaques (fig 3 and 4). The superficial layer of the epithelium consists of eosinophilic cuboidal or columnar cells (fig 5). Variable numbers of large granular cells, ciliated cells, mucous cells and vacuolated cells can be found within the epitelium. Mucin filled crypts or microcysts lined by cuboidal cells, that are presumed to result from folding of the lining epithelium. There will be very minimal inflammatory cell infiltrate in the fibrous capsule.

Histochemical, immunocytochemical, and ultrastructural features of GOC are still not investigated in detail. There was a immunohistochemical study done by Trios etal. in 1999, for bcl-2 protein, Ki-67 antigen and P-53 protein

in epithelium of GOC and Dentigerous cysts. They have suggested immunorectivity for bcl-2 protein in basal cell layers, but Ki-67 and P-53 were negative, concluding that the biological behavior of GOC is not associated with cell proliferation.

Treatment and Prognosis

Usually GOC is treated by enucleation, curettage or conservative resection, and enucleation to be the most common treatment modality. Most of the lesions are treated conservatively suspecting a radicular or residual cyst, similar to the present case. The treatment method is still controversial, as high recurrence rates have been reported (21%) [1].Therefore complete enucleation can be recommended with at least 3 years close follow up. As the number of cases reported is small, it is difficult to conclude reliably on the behaviour of these cysts. However it appears that the overall prognosis is good.

Fig.1 Lateral Oblique Radiograph of the Patient Showing the Well Defined Radiolucency

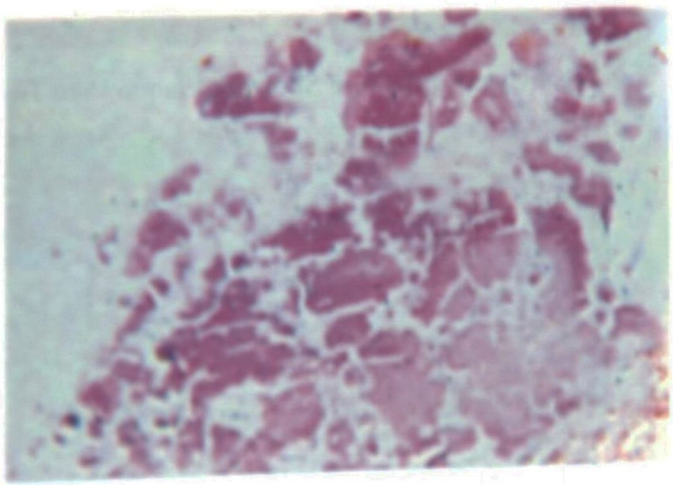


Fig.2 Presence of Hyaline Bodies Inside the Cyst Lumen

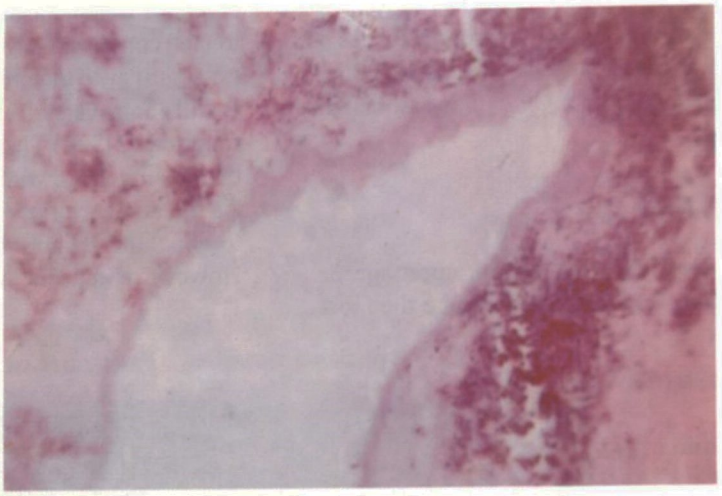


Fig.3 Cyst Epithelium Showing Plaque Like Thickenings

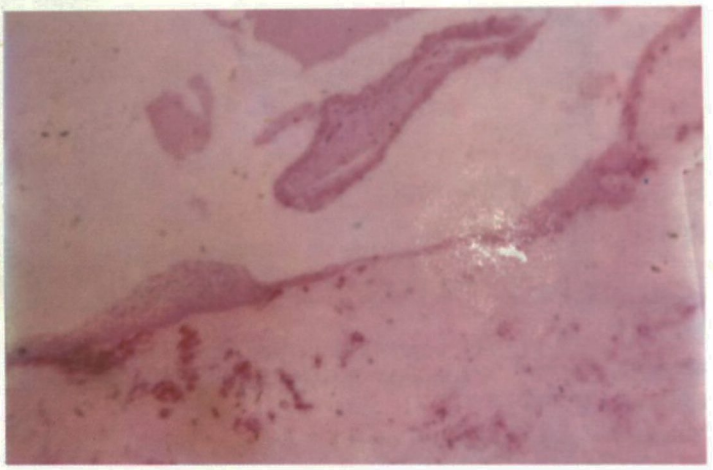


Fig.4 Cyst Epithelium Showing Plaque Like Thickenings

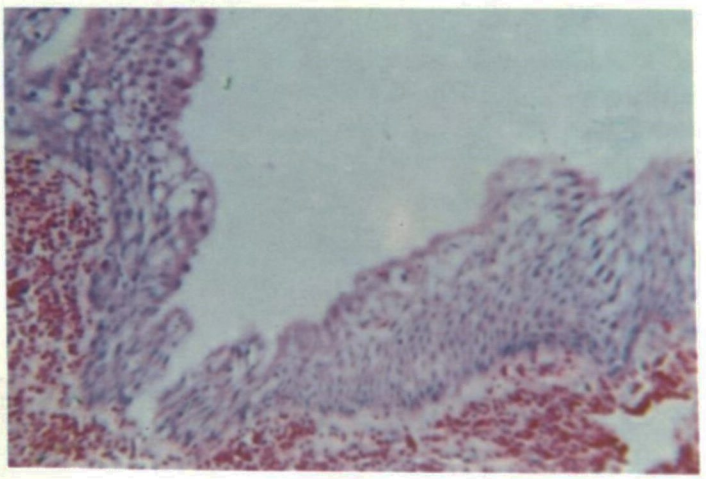


Fig.5 The Superficial Cuboidal Eosinophilic Cells and Mucous Secriting Cells in the Epithelium

References

1. Koppang HS, Johannessen S, Haugen LK, Haanaes HR, Solheim T, Donath K. Glandular Odontogenic Cyst (Sialo-Odontogenic Oyst): Report of Two Cases and Literature Review of 45 Previously Reported Cases. J Oral Pathol Med 1998;27:455-62.

2. Manor R, Anavi Y, Kaplan I, Caldron S. Radiological Features of Glandular Odontogenic Cyst. Dentomaxillofacial Radiology 2003;32:73-9.

3. Gunzil HJ, Horn H, Vesper M, Hellner D. Kiagnosis and Differential Diagnosis of Sialo-Odontogenic (Glandular-Odontogenic) Cyst. Pathologe 1993 Dec;14(6):346-50. (abstract).

4. Tosios KI, Angelopoulou EK, Kapranos N. Immunohistochemical Study of bci-2 protein, Ki-67 antigen and p53 protein in Epithelium of Glandular Odontogenic Cysts and Dentigerous Cysts: J Oral Pathol Med 2000:29;139-44.

5. Ide F. *et al.* Glandular Odontogenic Cyst with Hyaline Bodies: an Unusual Dentigerous Presentation. J Oral Pathol Med 1996Aug:25(7);401-4.

6. Toida M, Nakashima E, Okumura Y, Tatematsu N. Glandular odontogenic cyst: A case report and literature review. J Oral Maxillafac Surg 1994:52;1312-16.

7. Economopoulor P, Patrikiou A. Glandular odontogenic cyst of the maxilla: Report of a case. J Oral Maxillofac Surg 1995:53;834-7.

8. Sidoni A, D'errico P, Simoncelli C, Bucciarelli E. Central Mucoepidermoid Carcinoma of the Mandible: Report of a case treated 13 years after first radiographic demonstration. J Oral Maxillofac Surg 1996:54;1242-5.

9. Waldron CA, Koh ML. Central Mucoepidermid Carcinoma of the Jaws: Report of Four Cases with Analysis of the Literature and Discussion of the Relationship to Mucoepidermoid, Sialodontogenic, and Glandular Odontogenic cysts. J Oral Maxillofac Surg 1990:48;871-7.

10. Noffke C, Raubenheimer EJ. The Glandular Odontogenic cyst: Clinical and Radiological Features: Review of literature and report of nine cases. Dentomaxillofac Radiol 2002Nov:31(6);333-8.(Review)

FOR QUALITY BRAND
DENTAL INSTRUMENTS
DENTAL MATERIALS
&
ARTIFICIAL TEETH

CHIVKONZER
&
COMPANY

174,MEZZANINE FLOOR, PANCHIKAWATTE ROAD,
COLOMBO 10.
TELE : 2433249 FAX : 2438268

Sri Lanka Dental Journal 2005; 35(01) 33-34

Professor B R R N Mendis
BDS(Hons.),PhD(Bristol), FDSRCS(Eng.& Edin.), FFDRCS(1), MRCPath (UK) Part I
Professor of Oral Pathology, Faculty of Dental Sciences, University of Peradeniya &
Chairman, University Grants Commission.

Prof. Mendis graduated with 1st Class Honours from the then Dental School, Sri Lanka in 1967, obtaining distinctions in both Dental Surgery I and Dental Surgery II. Having joined the academic staff of the University of Peradeniya in 1968 after completing 1 and ½ year's service at the premier Dental Institute in Colombo he has been in continuous service in the University of Peradeniya from that time till March 2001. He was awarded the Ph.D. degree by the University of Bristol in 1977 for his thesis titled "The Response of the Pulpodentinal Complex to Attrition and Injury – a Quantitative Study".

Having returned to Sri Lanka in 1977, he developed the discipline of Oral Pathology in Sri Lanka from scratch, training technicians and developing an effective island-wide Biopsy Service and an Oral Pathology Museum. He also helped in the further development of the Department of Oral Pathology with designing infrastructure, structural layout and resource mobilisation for the new Japanese Government funded Dental Education Project. He played a major part in the introduction of Routine Histopathology, Hard Tissue Pathology, Museum Technology, Immuno-histochemistry and Molecular Biology. He supervised the first Ph.D. that the Faculty of Dental Sciences awarded in 1991. He has also supervised several M.Phill students to completion. In 1999 he was elected the Dean, Faculty of Dental Sciences of the University of Peradeniya. He was the President, College of Dentistry and Stomatology of Sri Lanka from 1995-1997. Prof. Mendis was appointed Chairman of the University Grants Commission (UGC) the apex body of the University system in 2001 and is functioning in the post from that date and is responsible for the smooth running of 15 Universities, 16 Institutes and 3 Campuses. According to the Universities Act No. 16 of 1978 the UGC is responsible for the activities such as, fund allocation to Higher Educational Institutions, monitoring of the performance of the Universities both academically and financially, responsible for the governance of Universities and the appointment of University Governing Councils, recommending the appointment of Vice-Chancellors of Universities and Directors of Institutes, processing student admissions to

Universities (2005 – 16007 students), creating new Universities (2 for 2005), creating new Institutes (3 for 2005) and new Faculties (3 for 2005), introduction of new Degree Programmes (13 for 2005) and increase in enrolments to Universities in 2005 by 1157, monitoring of the curriculum, course unit structure and Academic Term Synchronization and also the implementation of Higher Education Reforms.

In addition, the UGC is responsible for implementing and monitoring of US $ 41 million World Bank Improvement of Relevance and Quality of Undergraduate Education (IRQUE) Project, monitoring the Open University Asian Development Bank funded Distance Education Modernization Project (DEMP) of US $ 60 million, working with foreign donor agencies – JICA (Japan), Norad (Norway), UNFPA, Sida/SAREC (Sweden), Germany, DANIDA (Denmark) and Indian Credit Lines.

He holds membership of several scientific and professional associations – Member, British Society of Oral Pathology (BSOP), Member, International Association of Oral Pathologists (IAOP), Member, American Academy of Oral Pathologists (AAOP), Associate Member of the Royal College of Pathologists London (UK), Life Member, Sri Lanka Dental Association (SLDA), Life Member, Sri Lanka Association for the Advancement of Science (SLAAS), Life Member, Organization of Professional Associations (OPA) Sri Lanka and Life Member, Kandy Society of Medicine (KSM).

Prof. Mendis has a large number of local and international journal publications and has many text book references to his credit. He is also co-author of the text book on 'Modern Medicine for Dentistry'. He has delivered lectures in UK, USA, Japan, India, Germany, Switzerland, Burma, Indonesia, Thailand, Singapore, Malaysia, Oman, and Egypt.

Grave Problem No. 2	
No .of students who sat for the G.C.E. (A/L)	199,937 –
No. of students with minimum requirements for admission	108,357
No. that failed A/L examination	91,580

According to the Sri Lanka's University Admissions Policy which is based on the first 10% in order of merit receiving the University of their choice and the balance 90% being admitted on the students' Z Scores, the Districts from which the students sat the G.C.E. (A/L) examination and the student's choice, students are selected to various courses of studies. The existing policy for the University Admission is based on a quota system, namely All Island Merit (40%), District Merit (55%) and Educationally Underprivileged District Quota (5%).

When the above criteria are used it must be mentioned that a large number of students who have Z scores higher than those who are in Medical Schools are not selected for medicine in Sri Lanka. It ranges from 1784 in 2000 to 2892 in 2002 (Table 2).

Table 2 : Number of students who have not been selected for Medicine in Sri Lanka

The Z-Score and Medical Admissions in Sri Lanka

Year	Student Number
2000	1784
2001	2143
2002	2892
2003	2411
2004	1959

In order to address these issues, there are some approaches available for Sri Lanka

1. Increase student enrolments to the conventional state universities
2. Broad base secondary education to provide basic exposure in mathematics, science, commerce, accounting etc.
3. Register and grant degree awarding status to Private Higher Academic Institutions
4. Make it possible for students taking vocational training to earn transferable credits to other institutions
5. Invite reputable universities from overseas to establish satellite campuses in Sri Lanka
6. Establish active, meaningful partnerships on staff/student exchange programme with overseas faculties & reputed universities

It has been the focus of the University Grants Commission (UGC), to somehow increase the student enrolment to conventional state universities with enhanced funding and the introduction of new degree courses. The increase in student enrolment from 1996 to 2005 is shown in Table 3. The enrolment stands highest at 16007 for the 2005 June A/L examination.

Table 3: Increase in student enrolments to the conventional state Universities over a decade 1996 – 2005

Year of examination & Method of selection	1996 August (Agg) 4 sub	1997 August (Agg) 4 sub.	1998 August (Agg) 4 sub.	1999 August (Agg) 4 sub.	2000 July (Agg) 4 & 3 sub.	2001 August (Z.Sc.) 4 & 3 sub.	2002 April (Z.Sc.) 3 sub.	2003 April (Z.Sc.) 3 sub	2004 April (Z.Sc.) 3 sub	2005 June (Z.Sc.) 3 sub

In order to increase enrolments several new degree programmes have commenced in the conventional universities. These are shown in Table 4, Table 5 and Table 6. A total of seventeen new degree programmes have been added from 2003-2005.

Table 4: New Degree Programmes for 2003

	Programme	University	Degree	No. of Students
1.	Peace Studies & Conflict Resolution	Kln	BA	30

Table 5: New Degree Programmes for 2004

	Programme	University	Degree	No. of Students
1.	Information & Communication Technology (ICT)	Cmb (UCSC)	BSc	80
2.	Nursing	SJP	BSc	25
3.	Health Promotion	Raja Rata	BSc	25

THE COMMONWEALTH DENTAL ASSOCIATION

Progress Report by the Chairman Organising Committee of the 5th Triennial Meeting of the Commonwealth Dental Association to be hosted by S.L.D.A in December 4th to 6th 2006.

The 4th Triennial meeting of the Commonwealth Dental Association was held in Nairobi, Kenya from 4th to 6th December 2003. Dr. Hilary Cooray was nominated for the post of Vice President, CDA (Asia Region) by Dr. B.G. Nanayakara the President at that time. He was the only representative of the S.L.D.A. at this meeting.
He was contested by Dr. Thurairatnam of Malaysia. Dr. Cooray won by a margin of 26 to 4 votes. At this General Meeting Dr. Cooray placed a bid on behalf of the Sri Lanka Dental Association to host the next meeting in Sri Lanka in 2006.

On the 11th of September 2004

At the meeting of the CDA held in New Delhi the Executive Committee unanimously accepted the S.L.D.A's bid to hold the 5th Triennial Meeting in Sri Lanka in 2006.

On the 10th of October 2004

The Council appointed Dr. Hilary Cooray as the Chairman of the Organising Committee. The Hony Secretary through the News Letter called for members, wishing to serve in the Organising Committee to send in their names. There upon, according to the response the following Committee was constituted.

Dr. Hilary Cooray - Chairman
Dr. Malkanthi Chandrasekera - President 2004/5 Ex Officio
Dr. Sama Weerapperuma - Secretary 2004/5 Ex Officio
Dr. R. Kanna - Treasurer 2004/5 Ex Officio
Dr. Prasad Amaratunga - President Elect
Dr. Lional Dassanayake - Chairman (Scientific Programme)
Dr. Mano Fernando - Chairman (Promotion)
Dr. Malcolm Stainslaus - Chairman (Trade Exhibition)
Dr. B.G.Nanayakkara - Chairman (Public Relations)
Dr. Sunil Gunaratne
Dr. Vipula Wickramasinghe
Dr. Sunil Fernando
Dr. Jayasundara Bandara
Dr. M.D. Abdul Wajith
Dr. Kumar Warnakula - Secretary to the Committee

December 2004 – Inspection of Conference Venue by President CDA Dr. L.K. Gandhi

As per a decision of the Council CDA, Dr. Gandhi visited Sri Lanka to inspect whether Colombo would be suitable venue to host the CDA Conference. He was given a complimentary business class air ticket by Sri Lankan Airways and complimentary hotel accommodation at Holiday Inn, Taj, Colombo Plaza and Mahaveli Reach.
He had many meetings with S.L.D.A. Officers in Colombo and Kandy, BMICH, Hotels, Professional Congress Organisers and Sri Lanka Convention Bureau. This visit was arranged and co-ordinated by Chairman Organising Committee.
Dr. Gandhi had given a very good report with a high recommendation for Colombo as a good venue and he also concurred that Colombo Plaza to be the Congress Hotel and BMICH as the Conference Venue.

February 2005.

At the Executive Committee meeting of the C.D.A. the dates of the Colombo meeting was fixed for 1st to 3rd December 2006.

March 2005.

(a) Venue
The BMICH and the exhibition centre has been reserved for the above dates.
(b) Official Congress Hotel
Colombo Plaza has been reserved (200 Rooms) Trans Asia Hotel has been reserved (150 Rooms)
(c) Official Carrier
Sri Lankan Airways has been appointed. They will assist in promotions by giving us 50% discounted tickets to Congress Cities where Sri Lanka is flying. Also 15% discount will be given to delegates attending the conference.
(d) Principal Sponsor
Unilever has been offered to be the principal sponsor. We have had several meetings with them, but the negotiations are still not concluded.

April 2005. – Visit to British Dental Association - London

Dr. Mano Fernando, Chairman Promotions and Dr. B.G.Nanayakara, Past President had a meeting with Dr. Anthony Kravitz, President, British Dental Association, who is also the Treasurer, Commonwealth Dental Association, Dr. Sam Thrope, Secretary, Commonwealth Dental Association and M/s. Julia Campel, Administrative Secretary, C.D.A. We requested their assistance to bring 250 members of the B.D.A. for our conference. The have assured us of their unreserved support including publicity in the B.D.J.

May 2005. – Theme of Scientific Sessions – Yesterday, Today, Tomorrow

(a) Dr. Lional Dassanayake, assisted by Prof. D.Y.D. Samarawickrema, has formulated the above theme. It is desirable to have the names of some speakers before the 2nd announcement brochure.
(b) Report of Trade Exhibition Committee that participated at APDC in Malaysia from

25th to 28th of May 2005. – Dr. Malcolm Stanislaus

Members of the Committee

Dr. Malcolm Stanislaus - Chairman
Dr. Vipula Wickramasinghe - Co Chairman
Dr. Suresh Shanmuganathan
Dr. Hilary Cooray - Ex-officio

Sri Lanka Dental Association Booth was decorated on 25th afternoon and the Exhibition was started on 26th Morning. Dr. Vipula and I visited each and every Stall at the exhibition with Drs Hilary and Suresh helping us where ever possible introducing us to their friends.

The following are the almost or 100% confirmed ones who will be taking up stalls in our conference.

1. GC ASIA Dental Pte Ltd.,
   Mr. Michael J. Williams Managing Director
   Senior Reseacher 01 Stall
   02 Stalls and 02 Lecturers

2. Densply Asia
   Steven C.J. Tan
   Regional Manager
   [Dr. Suresh's Contact]
   03 Stalls

3. GAC Ortho. Com Pte Ltd.,
   Alvin Chia General Manager
   [Friend of Dr. Cooray]
   01 Stall

4. Dentamerica Asia Inc
   Douglas Huang Vice President
   01 Stall agreed to conduct Lectures
   Local Agent Senaratne Dental Co.

5. SHOFU
   Patrick S C Lake - General Manager
   01 Stall
   Local Agent Nawakrama

6. J. Morita Mjg Corp.
   Takeshi Waki
   Senior Reseacher
   01 Stall
   Local Agent - Infotee

7. Takara Belmont
   Local Agent Denme Lanka

8. Ivoclar Vivadent
   Local Agent - Unicel

9. Dia Dent Group International
   Local Agent

10. Edmin Idia Pvt Ltd
    Anil K Tandon
    01 Stall
    Dr Cooray' Friend

Local Agent Senaratne

Dental Supplies (Pvt) Ltd.,
5. Shofu 10. Edmin India Pvt Ltd.,
Mr. Patrick S.C. Loke Anil K. Tandon 01 Stall General Manager 01 Stall Dr. Cooray's friend
01 Stall

Local Agent - Nawakrama
I have already sent E-Mails thanking them for the interest shown in our conference and kindly consenting to come to Sri Lanka to make our conference a success and for the mutual benefit of both parties. Also I have sent E-Mails to 22 other probable traders who showed some interest, requesting them to consider our proposal.
The High Commissioner in Malaysia His Excellency, Mr. A.V. Cassichetty and 1st Secretary visited our booth and offered their assistance in follow up activities.

(c) Report of Chairman – Promotion Committee – Dr. Mano Fernando

Copies of 1st announcement brochure were distributed at the APDC delegates meeting to all official delegates, alternates and observers of the 36 member countries. The brochures were also distributed at our booth. We have spoken to nearly 250 dentists and invited them to Colombo and their visiting cards collected.

The other members of the SLDA team namely President, Prof. Malkanthi Chandarasekera and Secretary, Sama Weeraperuma, Dr. Reggie Gunatilake did an excellent job in promoting our congress at every opportunity. Mention must be made of the members of the Trade Exhibition Committee who helped us whenever the time permitted.

Future Activities

1. Promotions will be carried out at FDI 2005 Montreal, Indian Dental Association, Meeting, APDC Pakistan and FDI China.
2. Sponsors for various functions will have to be sourced. Any member who could assist us is cordially invited to join the Organising Committee.
3. If any member who wishes this committee to invite their foreign friends or colleagues are requested to give a list of such names to Chairman, Promotions (this is a special request to Foreign Dental Graduates). With the assistance and co-operation of the SLDA membership we are confident of a very successful and memorable 1st CDA congress in Sri Lanka.

Dr Hilary Cooray
Chairman, Organising Committee
Vice President, C.D.A.

With Best Compliments
From

GlaxoSmithKline - Consumer Healthcare

Makers of

Panadeine

REG.TM

Brand of paracetamol + codcine phosphate

65 C, Dharmapala Mawatha,
Colombo 07.

Tel : 2448653, 4790400
Fax : 2445182 / 5378905

DRUGS AVAILABLE WITH THE STATE PHARMACEUTICALS CORPORATION WHICH COULD BE USED FOR DENTAL PURPOSES.

ITEM	UNIT	SUPPLIER	W/S Price Rs.
Lignocaine with Adrenaline Injection	Vial	SARABHI-India	34.05
Amoxycillin Capsules 250mg	1000	RNBXY-India	1,450.00
Metronidazole Tabs 200mg	1000	UNIQUE - India	280.00
Asprin Tblets 300mg (Strip Pack)	100	AXON-India	62.55
Paracetamol Tablets 500mg (Regamol)	100	BALPH-India	35.00
Cephalexin Capsules 250 mg	100	RNBXY-India	300.00
Cotton Wool	100g	TASMED -Sri Lanka	29.00
Diazepam Tablets 2mg	1000	MSJ-Sri Lanka	55.00
Diazepam Tablets 5mg	1000	MSJ-Sri Lanka	69.00
Doxycycline Caps 100mg	50	HILTON-Pakistan	122.00
Diclofenac Sodium Tablets 50mg	100	MICRO- India	47.00
Diflunisal Tabs 500 mg (Dolobid)	100	MSD -Pakistan	3,430.00
Absorbent cotton Gauze B.P.36 x 6YDS	6yds	MEDTX - Sri Lanka	70.00
Ciprofloxacin Tabs 20mg	100	ECURE - India	168.00
Famotidine Tabs 20mg	336	NCOLS - India	132.00
Ibuprofen Tabs 400mg	100	CARYL - India	81.50
Omeprozole Caps 20mg	100	ECURE - India	145.50
Ranitidine Tabs 150mg	100	LYKA - India	150.00

The SPC has an excellent distribution net work which ensures that our products reach every part of the country. The SPC has 17 Rajya Osu Salas, 37, Franchise Osu Salas, 47 Distributors and 19 Authorized retailers distributed island-wide.

The SPC specializes in supplying imported and locally manufactured generics renowned for their safety, efficiacy and quality, conforming to BP/USP standards. Our Quality Assurance Laboratory quality checks all pharmaceutical products which are imported by the SPC both for the private sector and for the health services. All samples are analyzed at 4 different stages : (1) Tender samples (2) Pre-shipment samples (3) Pre-distribution samples (4) Sample testing to investigate complaints. SPC Quality Assurance Laboratory is the only pharmaceutical testing laboratory in Sri Lanka which has obtained laboratory accreditation for ISO 17025.

State Pharmaceuticals Corporation of Sri Lanka
No.75, Sir Baron Jayathilake Mawatha, Colombo 1.
Telephone: 2320356-9, 2328507 Fax: 2447118
Website:www.spc.lk Email:md.@spc.lk

Instructions for Authors

The Sri Lanka Dental Journal publishes the following categories of articles which have relevance to Dentistry and allied sciences.

1. Leading articles - One article per issue. It may be solicited by the Editor. Authors are welcome to submit leading articles on current topics of interest. One's expertise or commentaries on general practice etc. They should be approximately 1500 words in length. References should be 20 or less.

2.Reviews - Reviews are detailed surveys of published research pertinent to dentistry and associated sciences. They should be critical in nature and should not normally exceed 3000 words and 30 references.

3. Research articles - Articles resulting from research work belong to this group. Results from routine clinical examinations or laboratory investigations will not be considered under this category. Subjects may vary from clinical trials to basic science research, historical analysis to dental economics. They should not exceed 3000 words and 30 references. A reasonable number of tables and illustrations will be accepted.

4. Short reports - These include reports on current topics, modified techniques. new materials, practice management etc. Interesting results from routine, clinical work or laboratory ill vestigations also may be accepted.

5. Case reports - Reports such as of rare diseases or conditions. Modifications to accepted treatment procedures, new management methods etc. may be included in this category.

6. Letters to Editors - Subjects unlimited, but may include short critique of published papers in the SLDJ.

7. Miscellaneous topics - Subjects unlimited and the format are free. These may also include details of scientific meetings, conferences, annual sessions, examinations, news and views, visits and obituaries.

8. Proceedings of annual sessions - Abstracts from annual sessions of the SLDA and other colleges will be published under this category.

Submission of manuscripts

Authors submitting a paper do so on the Understanding that no part has been published before. that it is not being considered for publication elsewhere and that it has been read and approved by all the authors.

Manuscripts including Tables and Figures should be sent in triplicate as the work will be reviewed by two or more referees. While papers are subject to editing. The journal does not hold it responsible for statements made by the contributor. The author alone is responsible for the statements made in his paper.

Submission of a manuscript means that authors automatically agree to assign exclusive copyright to the Sri Lanka Dental Association if and when the manuscript is accepted for publication.

Manuscript on disk

Once an article has been accepted for publication. the author will be asked to supply a copy of the final manuscript on disk together with two copies of the complete manuscript. Every disk must be clearly labelled with the name of the author, title, software and program version number.

Manuscript style

The manuscripts should be typed, double-spaced: on A4 (21 2x297 mm) paper and submitted in correct English: both English and American spelling are acceptable, provided this is consistent throughout the manuscript.. Manuscripts not submitted in proper format or in poor English may be returned without review. The format of a manuscript should be as

follows: Title page. Abstract. Introduction, Material and methods. Results. Discussion. Acknowledgements. References. Figure legends. and Tables, arranged in that order.

Title page - The title page should contain the following information in the order given: 1) a concise but informative title; 2) author's full names' (without degrees and titles): 3) author's institutional affiliations: 4) a running title. not exceeding 40 letters and spaces; 5) name, address, telephone, telefax and electronic mail address of the author responsible for correspondence.

Abstract page - Original and review articles must contain an abstract of approximately 250 words with four specified subtitles:

I) Objective: An introductory sentence indicating the objective and purpose of the study.

2) Material and methods: A description of experimental procedure including applicable statistical evaluation.

3) **Results**: A summary of the new. Previous unpublished data and results.

4) Conclusion: A statement of the study's conclusion 3-5 key words according to Index Medicus should be provided.

Introduction - The introduction should carry sufficient background information on the subject of study.

Material and methods - Procedures should be described in such detail as to make it possible to repeat the work. Subheadings may be used to improve clearness. Correct unit abbreviations should be used (e.g.; "h", "min", "s" and "Fm" rather than "hr", "minutes", "sec" and "Fl". respectively).

The authors should consider the ethical aspects of their research and ensure that the work has been approved by an appropriate Ethical Committee. Where applicable, a copy of the ethical clearance certificate should be attached. In human experimentation. informed consent from individuals should be Obtained and this should preferably be stated.

Statistical analysis - Since many scientific investigations rely on statistical treatment, authors are strongly urged to consult a person with in-depth statistical knowledge. Manuscripts with a clear element of statistics are regularly refereed by the Journal's statistics consultant.

Results - The Results section should clearly and concisely present the findings of the research, as a rule in the past tense without subjective comments and reference to previous literature. The results should be supported by statistical or illustrative validation. For the sake of clarity this section may have subheadings.

Discussion - This section should present the interpretations of the findings and is the only proper section for subjective comments. Authors are strongly urged to avoid undue repetition of what has been reported in Results.

Tables - The tables should be numbered in the order" of appearance in Arabic numerals, Each table should have a brief explanatory title. Each table; should be typed on a separate sheet, with due regard to the proportion of the printed column/page.

Figures - All graphs, drawings, and photographs are considered figures and should be numbered in the order of appearance in Arabic numerals. Each figure should have a brief and specific legend, and all legends should be typed together on a separate sheet of paper. Photographs should be glossy prints and the reverse should give the figure number, title of paper principal author's name and have a mark indicating the top. Colour illustrations may be submitted in instances where their use may contribute significantly to the scientific value of the article. Colour illustrations may be printed free of charge at the Editor's discretion, whereas others may be printed at the author's expense.

References - References are listed double-spaced in a separate reference section immediately following the text. References are numbered consecutively in the order in which they appear in the text; do not, alphabetise. Identify references in texts, tables and legends by Arabic numerals (within parenthesis).

Congress abstracts should not be used as references nor may "unpublished observations" and "personal communications" be placed in the reference list. References cited as "in press" must have been accepted for publication and not merely in preparation or submitted for publication

Examples of correct. forms of references are given below. These are based on the format used in the *Index Medicus.* Abbreviate journal names according to the *List of Journals Indexed,* printed annually in the January issue of *Index Medicus.* List all authors; do not use *et al.* in the reference list.

Journals

Standard journal article

Bartlett IG, O'Keefe P. The bacteriology of the perimandibular space infections. JOral Surg 1979; 37: 407409.

Corporate (collective) author

WHO COLLABORATING CENTRE FOR ORAL PRECANCEROUS LESIONS. Definition of leukoplakia and related lesions: an aid to studies on oral precancer. Oral Surg Oral Med Oral Pathol 1978; 46: 518-539.

Unpublished article

Barker DS. Lucas RB. Localised fibrous growth of the oral mucosa. J Dent Res 1965: in press.

Books and other monographs

Pindborg JJ Atlas of diseases of the oral mucosa. 5th edition.. Copenhagen: Munksgaard, 1992: 50-66.

Chapter in book

Boyde A. Amelogenesis and the structure of enamel. In: Cohen B. Kramer KH (eds). Scientific Foundations of Dentistry. William Heinemann Medical Books Ltd. London. 1976: 335-352.

No authror given

International statistical classification of diseases and related health problems, 10th revision, vol 1. Geneva: World Health Organisation, 1992; 550--564

Library,
Faculty of Dental Science
University of Peradeniya

Contributing to Advancement of Dentistry
with latest Equipment and products of International repute

UNICEL

(PRIVATE LIMITED)

25 Hedges Court, Colombo 10, Sri Lanka.
Phone : 94 11 2699765/ 2686848 Fax : 94 11 2697097/ 2686848
e-mfail: unicel@eureka.lk

Branch Office and Showroom:
436/1, Peradeniya Road, Kandy. Phone: 08 235681

Sole Agents in Sri Lanka for:

DENTAURUM IVOCLAR-VIVADENT VOCO
ZHERMACK MANI DIADENT YOSHIDA
MEADWAY GOOF PENG LIM

Flexible study

for working dentists from the Universiy of London

M.Clin.Dent. (Prosthodontics)

by e-learning and 7-9 day residential courses

Residential courses are now available in India or London

This University of London Masters degree is part of a range of distance learning qualifications developed by academic staff at the internationally renowned Dental Institute of Guy's, King's and St. Thomas's Hospitals, King's College London. Dentists all over the world are studying on our programmes while maintaining their careers and practices.

This degree, which is now is now in its 7th year and is registered by the GDC as an additional qualification, provides an in-depth understanding of general dental practice. You will learn about new materials and the latest techniques. Topics covered include: occlusion, aesthetic dentistry, endodontics, introduction to implants, TMD management, ceramics, composites, adhesives and periodontology. The course makes use of the very latest technology available; you are taught via interactive text, videos and images within an easy to use learning environment. You will participate in discussion groups with other dentists on the course and access tutor help by email. Additional resources are available through the University's online library.

For more information please contact our Information Centre (05/SLDJ):

Tel: +44 (0)20 7862 8360

Email: m.clindent@kcl.ac.uk

www.londonexternal.ac.uk/dentistry

With Best Compliments
From

M/s. Darley Butler & Co., Ltd,
98, Sri Sangaraja Mawatha,
Colombo 10.

Marketers of

Ultra β®
WITH DUPONT TYNEX HEXAGONAL BRISTLES

O-GUARD
Double Action
TOOTHBRUSH

DENTA WITH SOFTER DUPONT TYNEX BRISTLES Kid®

DENTA® WITH DUPONT TYNEX BRISTLES

Super Quality Tooth Brushes

Maximum germ protection!

SLDA ACCEPTED SRI LANKA DENTAL ASSOCIATION

RECOGNIZED by fdi FDI World Dental Federation

FDI recognizes that twice daily brushing with a fluoride toothpaste such as Signal is beneficial to oral health.

Unilever