

In addition, to identify whether the students observing remotely believed that they had been disadvantaged by the inability to question the demonstrator during the demonstration.

METHOD: 17 students divided into two groups observed a live demonstration of a laboratory technical procedure either at the workbench, or remotely on a Plasma Screen with the aid of video cameras. They subsequently observed a second demonstration with the roles reversed. Questionnaires were used to obtain the students' views of their ability to see and interact with the demonstrator.

RESULTS: The responses of the students observing the demonstration on the Plasma Screen indicated that they felt that they were able to see the demonstration more clearly than those observing at the workbench ($p=0.04$). Those observing on the Plasma Screen first, indicated this in particular ($p=0.03$). The majority of students acknowledged their inability to ask questions when observing on the Plasma Screen and supported the idea that the Plasma Screen should be used to complement the demonstration at the workbench.

CONCLUSION: Plasma Screen technology has considerable potential as a teaching tool for small groups of student, where it can afford significantly superior views of practical procedures. The students considered that the Plasma Screen would be best employed to provide close up views to supplement a live demonstration. The apparatus may be used remotely more successfully if video-conferencing technology were also employed to facilitate interaction with the demonstrator.

45. Prosthetic Dentistry on the Internet

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Since the late sixties when the ARPANET- first computer network was developed, Internet has had a great impact on the way of thinking, buying, teaching, learning and everyday life, including dentistry. The beginning of internet in science and research, has proved to be irreplaceable way of communication between researchers all over the world. Currently (April 2002) one of the most popular search engines on the net (Google) indexed about 2 billion web pages, 35 million of non HTML documents and 700 million Usenet messages, which makes the Internet the greatest information service ever.

The purpose of this study was to investigate which part of the web space is taken by prosthetic dentistry and the importance which it gains on the Internet. The method used was standard Internet search engine keyword queries performed using six web search engines: Google, Lycos, Infoseek, AltaVista, Northern Light, HotBot and Excite.

Research results suggest that there is currently (May 2002) about 30 thousand pages (0.0015% of searched web space) which contain terms: prosthetic dentistry or prosthodontics and about one thousand web pictures connected to these terms. Content analysis suggests that quality and real informative value of the majority of those pages is low. To conclude-informative space on the Internet concerning prosthetic dentistry is still in development and the need for confirmation and authorized information is obvious.

POSTER PRESENTATIONS

46. Influence of Sex, Age and Presence of Functional Units on Optical Density and Bone Height of the Mandible in the Elderly

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OBJECTIVES: Mandibular bone height and density were compared with age, sex and the number and type of functional dental units, as represented by Eichner index.

MATERIAL AND METHODS: A sample of 150 elderly patients of the Dental Clinic were divided into three age groups, examined and orthopantomograms/OPG/ taken. The OPGs were taken with the copper stepwedge in order to enable computer-assisted calculation of mandibular optical density and calibration of dimensional measurements by specially designed software.

RESULTS: Eichner class III was found in 62% of patients. The presence of functional units was positively correlated with age ($r=0.67$) and bone height values ($r=0.88$, $p<0.05$). Optical density and bone height values of measurements performed at the same locations on

mandibles showed no significant correlation ($r=0.24$, $p<0.05$). Intra-subject measurement showed that the eminentia piriformis region had significantly higher optical density values compared to 1st molar and mental foramen regions ($p<0.05$). Women had significantly lower bone height values than men ($p<0.05$), but no significant sex difference was found in optical density values.

CONCLUSION: The presence of functional units has significant influence on bone height, although, like age or sex of the patient, it has no influence on mineral content of the mandible. The eminentia piriformis is not susceptible to bone mineral content or height change.

47. The Rate of Resorption of Different Regions of Residual Ridges in Complete Denture Wearers Dependent on the Region and the Period Following the Last Extraction. One Year Study.

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Residual alveolar ridges (RR) show continual resorption after the loss of the natural dentition, resulting in reduction of the morphologic face height and counter-clockwise rotation of the mandible, regardless of whether the dentures are worn or not. The aim of this study was to analyse residual ridge resorption (RRR) in 5 different regions of both jaws on the successive lateral cephalograms of 50 complete denture wearers and to correlate such changes with the number of years of edentia and the region where the last extraction was performed. The height of the residual ridges was measured on 5 different sites of the mandible and the maxillary RR using a calibrated grid. The results revealed that all the patients showed significant RRR in the one year period ($p<0.01$), which was 2.5x more in the mandible than in the maxilla. RRR was bigger in patients who had had their last extraction within a period of one year before receiving their dentures, than in patients who had extracted their teeth earlier ($p<0.01$). However, the rate of RRR was significantly higher ($p<0.01$) in the anterior regions of both jaws compared to distal regions (0.41 and 0.42 mm

in the incisive/canine region: 0.2 and 0.17 mm in the pre-molar/molar region for the maxilla 1.05 and 0.82 mm in the incisive/canine region : 0.27 and 0.11 in the pre-molar/molar region for the mandible), even in patients where the last extraction was performed in the premolar region. It seems that the structure of the bone and strains in RR, due to loading from the dentures, may play a role, not only the period following extraction and the region of the last extraction.

48. Satisfaction with Removable Denture Therapy in Complete and Partial Denture Wearers

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The aim of this study was to evaluate patients' satisfaction with their dentures, with denture retention, speech, chewing ability and the comfort of wearing dentures in complete denture (CD) and Kennedy Class I removable partial denture (RPD) wearers. The aim was also to compare the level of satisfaction between the CD and RPD wearers. A total of 156 CD and 103 RPD wearers took part in this study. Patients graded their satisfaction by using an analogue-visual scale from 1 to 5. The statistical analysis was made (descriptive statistics, Kolmogorov-Smirnov one sample test, Mann-Whitney test). The following conclusions were made: Both CD and RPD patients were mostly satisfied with their dentures (the distribution of the scores of the patients' assessments was not as described by Gauss, but was skewed towards the highest scores). Variables were ranged from the best to the worst grades in the group CD wearers as follows: retention of upper CD, comfort of wearing upper CD, speech, aesthetic, overall satisfaction, chewing ability, retention of lower CD and comfort of wearing lower CD. Variables were ranged from the best to the worst grades in the group of RPD wearers as follows: aesthetics, retention of upper RPD, comfort of wearing lower RPD, speech, retention of lower RPD, overall satisfaction, chewing ability and comfort of wearing lower RPD. The difference of the satisfaction between RPD and CD wearers was significant ($p<0.05$) for the comfort of wearing lower denture (higher scores RPD wearers), for the retention of lower denture (higher scores RPD wearers), and for chewing ability (higher scores CD wearers).