

PD.172 The anterolateral thigh (ALT) flap in orofacial reconstructive surgery

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Introduction: Reconstructive surgery for defects resulting from head and neck cancer allows tumor resection while maintaining quality of life. Free flaps have been in clinical use for nearly three decades. In that time, their survival rates have improved as refinements have been made in surgical technique and instrumentation. Recently, the anterolateral thigh flap, first described by Song et al, has gained popularity in head and neck reconstructive surgery.

Materials and Methods: Patients records, surgical technique, clinical and functional outcome of patients with head and neck carcinomas reconstructed with anterolateral thigh flaps in our department will be analysed.

Results: The ALT flap is a versatile soft-tissue flap in which thickness and volume can be adjusted for the extend of the defect. In our experience, flap elevation is relatively easy, although surgeon should be familiarized with the anatomy of donor site. It has a consistent anatomy of the main pedicle (descending branch of the lateral femoral circumflex vessels), with a suitable length (8 to 12 cm) and a relatively large external diameter of the vessels (artery, 2.1 mm; vein, 2.3 mm).

Conclusion: The safety and versatility of the ALT flap permits an accurate reconstruction of intraoral defects. It is especially useful for reconstruction of big defects where radial forearm flap may be too thin or too small to cover the defect, but it can be harvested as thin as the radial forearm flap, with the additional advantage of reduced donor site morbidity.

PD.173 Soft tissue reconstruction in the oral cavity: free thigh flap vs. radial forearm flap

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Introduction: The minor resection of anterior and lateral oral floor and palatal-amigdaloglossos region and partial glossectomy were always treated with brilliant results with the radial forearm flap, a flap with good characteristics of versatility and adaptation. In the last few years, a new concept based on the utilization of septocutaneous artery, has given the possibility to use other types of flaps, like the antero-lateral thigh flap. This flap was first used in the penis reconstruction, then was adapted to the oncologic surgery of the oral cavity after minor resection.

Materials and Methods: The Authors present their experience with the two types of reconstruction and try to make a comparison between their characteristics. There are common aspects, like harvest time, the possibility to be innervated and utilization with or without their fascia.

Results: The antero-lateral thigh flap presents a minor anatomic variability (only in 3% we can observe the absence of perforator vessels) and surely a minor morbidity of donor site, with direct closing surgery, without skin grafts, and without the sacrifice of an important artery, the radial artery, like in the radial forearm flap.

Conclusion: We consider that, according to our experience, both in the reconstruction of high mobility districts of the oral cavity (soft palate, oral floor and tongue) both in the low mobility districts (hard palate, alveolar ridge, cheek), the use of the antero-lateral thigh flap represents a good alternative to the radial forearm flap.

PD.174 The use of DCIA composite flap for mandible and maxillary reconstruction

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Introduction: In the last few years immediate microsurgical reconstruction of maxillary and mandibular bones, especially after major oncological resections or major trauma has become the treatment of choice due to its functional outcomes.

The composite DCIA and internal oblique flap can be considered the ideal flap for mandibular defects within 12 cm of bone loss.

Materials and Methods: In this paper we present indications and technical details together with clinical results of consecutive patients who underwent immediate reconstruction with this technique.

Results: The composite DCIA and internal oblique offers a complete reconstruction technique after mandibular and maxillary reconstruction where there is no need to reconstruct the skin layer, providing for the adequate width, height and quality of bone and intra oral soft tissue lining.

Conclusion: The amount and quality of bone has been proved to be ideal for dental implant placement and therefore for a complete functional rehabilitation of patients.

PD.175 The use of three phase scintigraphy and orthopantomography for the evaluation of vascularized bone grafts in the head and neck area

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Introduction: Post-operative monitoring of free tissue transfer in head and neck reconstructive surgery is mandatory. When composite defects are reconstructed and free bone flaps are used, post-operative monitoring includes the degree of bony union and osseous integration of the flaps to the recipient area. Equally important is the assessment of the osseous flaps several months or years post-operatively in order to evaluate the degree of bone resorption.

Materials and Methods: Twenty-two patients (16 male and 6 female) with ages ranging from 29 to 72 years (mean 58 years) subjected to free bone transfer for maxillofacial cancer from September 1999 to September 2004 were included in the present study. In 19 patients the free bone grafts were used to reconstruct mandibular defects and in three parts of the maxilla. In 5 patients the fibula was used as a graft and in 17 the radius. The bony union and monitoring of the flap was performed with the use of orthopantomography and 3-phase bone scintigraphy. The mandibular blood supply was recorded in each patient after a bolus administration of 20 mCi MDP-Tc 99m. Thirty consecutive images were recorded for each patient. The time activity curves were recorded separately for every area of interest. Curves from the reconstructed areas were compared to those of the remained osseous segments of the bones. Scintigraphic images and orthopantomographs were also correlated.

Results: In 19 of the 22 patients, symmetrical and equivalent or even superior curves of the bone grafts were recorded. Bony union was confirmed radiographically. In one patient the bone graft was necrosed after exposure and was excised. The soft tissue part of the flap survived. In two patients, scanning

and X-ray images showed decreased vascularization and severe bone resorption.

Conclusion: The combined use of 3-phase scintigraphy and orthopantomographic imaging is a reliable and accurate method to assess and evaluate the vascularity and the degree of bony union of free vascularized bone grafts in the maxillofacial region.

Epidemiology 3

PD.176 Role of dentist in tobacco cessation intervention

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Introduction: Tobacco in any form smoking or smokeless are risk factors in the development and progression of oral & dental disease. This study was aimed to examine the effects of smoking and smokeless tobacco on oral health in non-diabetic and diabetic subjects in Bangladesh.

Materials and Methods: 200 non-diabetics mean age 30±9 years and 200 diabetics mean age 47±11 years randomly selected from BIRDEM dental out patient department. Clinical investigation was performed and the subjects answered a questionnaire about their bad breath and were subsequently divided into 4 categories according to tobacco habits. The levels of gum recession and bleeding were recorded on 4 sites of selected teeth according to the WHO criteria

Results: Study shows greater numbers of diabetic male (23.1%) are smoker and female diabetic (19.6%) are smokeless tobacco user compared to non-diabetic group. There is a statistical significant relation between chewing tobacco ($p < 0.009$) with gum recession and cigarette smoking habits ($p < 0.018$) with gum recession in non-diabetic group compared to diabetic group. Results revealed there is a significant relation between dental diseases (gum bleeding, gum recession and halitosis) and smoking in male group ($p < 0.001$) and smokeless tobacco use in female group ($p < 0.003$) of subjects

Conclusion: The use of smoking and smokeless tobacco risk and in addition to the other diabetes risk factors – the presence of oral and dental disease is also very common. So, tobacco cessation intervention program should be introduced in every dental and diabetic hospitals or centers as a routine work. Dental health care providers can improve the health care service by providing tobacco Cessation Intervention program and evaluation of the effectiveness of the program and thus prevent the oral cancer at large.

PD.177 "Oral suicide" spreading dangers in south east Asia

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Introduction: Inherited culture in the past Indian Subcontinent present India, Pakistan and Bangladesh, hold the norms & traditions.

Pan Chewing is a regular habit of millions of inhabitants of these areas, which not only involved the huge expenditure of every day, also creates several social problems of personal & civic cleanliness. Several factors behind Primitive cultural

values, vast illiteracy, Ignorance, of personal Health & Hygiene. Role of state in these countries is criminally Negligent and Governments pay no importance to this crucial element of Public Health. The acute outcome of this dangerous habit is the spreading of 'Oral Oncology' or "Mouth Cancer" with alarming speed every day, apart from other medical complications. We should accept that dangerous effects of this 'Bad Habit', People's are getting consolation against social, moral economical suffering they pass through in every moment of their lives.

Another form of "Oral Suicide" not confined to any regional area of our world, but harming 'Humanity' at large, is commonly known as "Tobacco Smoking" or Cigarette smoking. Habit of smoking is a "Global Habit" and unfortunately the modern and developed countries in the world are the most effective victims of this habit. Presently picture is very gloomy and tragic, that despite continuous efforts made by the World International Health Organizations, spending billion of dollars every year, they are unable to attain the success in decomposing the dense clouds of smoke around the world. Loss of countless lives through the oral suicide or mouth cancer every year around the world. Workings of International Community to fight against this evil are commendable; keeping in view the complexity of this problem it demands tireless War with the hope of Victory some day.

Materials and Methods: The Local Studies

Results: Users are Negative to leave this habit and government is not serious to put restriction and control over this danger.

Conclusion: Extensive Efforts and Social Counselling is required to give true Awareness about this Spreading Danger.

PD.178 Patterns and reasons of paan and gutka use in the Indian-Gujarati community in New York City

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Introduction: Smokeless tobacco and areca nut are popular in India and with Indian immigrants, most commonly used as paan and gutka. Their regular use leads to oral cancer. An increased risk of oral cancer in Indian immigrants has been reported across the world, related to the continued use of these products. The Indian community in the U.S. is large and rapidly growing. Paan and gutka are legal in the U.S. and readily available. The increasing popularity of gutka is disturbing. However, epidemiological studies in the U.S. on paan and gutka use are entirely lacking.

Materials and Methods: Funded by NIDCR/NIH Grant #U54-DE14257 and NCI Grant #U01-CA86286, we conducted the first ever pilot study of paan and gutka consumption in the Indian-Gujarati community in NYC. A 108-item questionnaire was developed to collect information on paan and gutka usage, and health related beliefs. It was administered to a convenience sample of first-generation immigrant adults at community sites.

Results: 42 subjects were recruited (54%M). 45% reported ever-regular paan use, of which 5% currently use. All paan use was initiated in India, reasons included tradition and encouragement by friends/family. Reasons for quitting were moving to, social unacceptability in, and unavailability in, the U.S. 31% reported ever-regular gutka use, of which 77% currently use. 54% of gutka use was initiated in the U.S., principal reasons being friends and moving to the U.S. 56% said paan, and 92% said gutka is harmful to health. 45% thought paan could, and 92% thought gutka could cause oral cancer.