The history of materials health and social care essay

12: Thepatient had a history of an acute sinusitis attack 6weeks ago. Maxillary sinus floor was augmented by meansof internal technique in the first molar regionon the left side using 0. 5 gr xenograft (BioOss®, Geistlich Sons Ltd) and an implant in a diameterof 4. 1x12 mm (ITI®, Straumann) was placed(Figure 2). No complications occurred during thesurgical procedure. Four weeks after the surgery, the patient had pain on the region of the implantinserted with the internal lifting procedure. Clinicalexamination showed postnasal drip, swelling andhyperemia on the operated side. Full opaque appearance of left maxillarysinus on the panoramic radiograph confirmed theacute maxillary sinusitisFinally, the implant was extracted and a purulantfluid was drained from the implant socket. Anew implant in a diameter of 4. 1x12 mm (ITI®, Straumann) was inserted to the canine region

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1. Thepatient was treated with an autogenous onlay corticocancellous bone graft, harvestedfrom the iliac crest, affixed to the anterior maxilla, and placed through a labialvestibular incision. Six months later, three Brånemark implants (Nobelpharma AB, Gothenburg, Sweden) were placed in the anterior maxilla. Two months after implant placement, one ofthe implants had been expelled through the nose upon sneezing. A panoramicradiograph revealed that only one of the three implants remained in the surgical site. In addition to the expelled implant, another implant had been dislodged into the rightmaxillary sinus2. A 67-year-old woman presented to the OMFS Clinic requesting a consultationregarding failure of maxillary implants previously placed by her private dentist. Approximately 1 year prior to her presentation, she had undergone placement of twoimplants on each side of the posterior

maxilla. Immediately after implant placement, pain in the right maxillary area developed. The right maxillary implants wereremoved, along with a significant amount of bone, resulting in an oroantral fistula, which was surgically closed. The extent of the defects in the bony floor and thelateral wall of the right maxillary sinus precluded the possibility for further bonegrafting13. Eight patient histories illustrating maxillary sinus– related complications, such aspain, infection, implant migration, and bone loss associated with maxillaryendosseous implant reconstruction, are reported hereinThe patient was treated with bilateral sinus-lift procedures with autogenous iliac-crest bone grafts in preparation for subsequent endosseous implant placement. Six months later, endosseous implants were placed in the maxilla bilaterally, andin the left mandible (Fig 3b). Following placement of the implants, the patientdeveloped pain and swelling in the right maxilla. Radiographic evaluation revealedthat the implants appeared to have a bony interface with no evidence of boneresorption. The local vestibular swelling responded to antibiotic therapy; however, the patient developed persistent pain and tenderness with signs of chronic infection. Consultation with an otolaryngologist was obtained. In an exploratory Caldwell-Lucsurgical procedure, the implants appeared covered by bone and were clinicallyosseointegrated. A 1. 5-cm, sphere-shaped foreign-body mass composed of a blackmaterial was curetted from the maxillary sinus. The inflamed contiguous mucosallining was removed as well. The pathology and microbiology reports of the removed material were consistentwith aspergillosis (Fig 3c), which is sensitive to amphotericin B. The patient wasJOMI on CD-ROM, 1995 Apr (451-461): Maxillary Sinus Complications Related to End… Copyrights © 1997 Quinte…initially treated intravenously

with amphotericin B and then orally with itraconazol100 mg per day for 6 weeks. To date, the pain and discomfort have not resolved, andthe patient has had two more exploratory surgical procedures demonstrating no signsof acute infection. The implants are stable and appear to be covered with bone andosseointegrated, clinically and radiographically. A bone scan (technetium –99diphosphate) revealed an area of increased activity in the right maxilla. However, awhite blood cell gallium scan (Ga67) indicated a noninflammatory process in theright maxilla. At the request of other consulting physicians, the right maxillaryimplants were removed. The pain has not been resolved and it has been diagnosed asbeing neurogenic in origin. 4 , 5….. as like other cases. 6. A 66-year-old woman with a history of fibromyositis and muscle amplificationsyndrome, for which she was taking prednisone 5 mg every other day, had 10- and7-mm Brånemark screw-type implants placed in the left posterior atrophic maxilla (Fig 6). Six months after implant placement, only the more anterior implant hadintegrated, while the posterior implant required removal. Three months later, anotherimplant, 10 mm in length, was placed more anterior to the failed implant. Thisimplant had penetrated the floor of the maxillary sinus but did not produce any sinussymptomatology. Six months later, this implant was uncovered, and during theattempt at abutment connection, the implant was dislodged into the maxillary sinus. The implant was retrieved through the implant-preparation site and did not require aCaldwell-Luc approach for retrieval. The wound was closed primarily and healedUneventfully7…. nothing special8. bilateralmaxillary sinus-elevation surgery was performed with augmentation using anautogenous tibial bone graft (Fig 8b). Suppurative drainage 3 weeks postoperativelywas detected in the maxillary ridge. The culture report revealed Escherichia coli.

Treatment with oral amoxicillin with clavulanate potassium was initiated, but the infection persisted. Surgical debridement and removal of the bone graft from the leftmaxillary sinus was required15.. Four grams of bone graftmaterial (irradiated cancellous particulateallograft bone; Rocky MountainTissue Bank) was placed into the sinus liftcavity. A collagen membrane (Conform, Ace Surgical Supply, Brockton, MA)was placed over the lateral aspect of thebone window. The flap was replaced, and 4. 0 nonresorbable suture material(Cytoplast PTFE; Osteogenics Biomedical, Lubbock, TX) was used to stabilizethe flap. This patient was prescribed 150mg clindamycin four times per day for10 days and 0. 75 mg dexamethasonefour times per day for 6 days. Thepatient started these medications oneday before surgery. 2 weeks after thesurgery, the patient reported pain anddiscomfort, with drainage from his nasalcavity on the operative side. Yellow mucus discharge from theright nostril was cultured in standardtransport media. A mixture of aerobicand anaerobic bacteria was noted. Thepatient was prescribed clindamycin300 mg along with metronidazole 250mg to reduce the possibility of havinganaerobic bacterial infection. The patientshowed no improvement, and hewas then prescribed tetracycline 500mg, for 10 days. On the second day oftaking tetracycline (21 days after thesurgery), the patient reported swellingin the right maxillary sinus area. Therewas also pain on palpation, malaise, and fever. After several weeks, the intraoralsoft tissue stoma had closed. Underlocal anesthesia, a full-thickness flapwas reflected over the right maxillarysinus wall, and access was madethrough the previous lateral window. Findings included showed frank pusaccumulation and unattached bonegrafting material. The area was curettedand irrigated with saline. Suturingwas done

using a 3. 0 PTFE with interruptedtechnique. The otolaryngologist performed anendoscopic examination under generalanesthesia (Fig. 3). Findings were consistentwith stenosis of the right maxillarysinus ostium (Fig. 4). Balloon catheterizationand widening of the ostium werecompleted (Fig. 5). Cultures were takenduring the surgery, and the sinus wasexamined using a fiberoptic probe. These cultures had shown presence ofPrevotella species and were identifiedas Prevotella melaninogenica. The baseof the Schneiderian membrane on theother hand appeared intact. No other abnormalitieswere noted. The patient did improve after theprocedure and was less symptomatic. Two months later, the patient developedcopious clear mucus dischargefrom the right nasal cavity and alsonoted tenderness of the right maxillarysinus. In addition, he reported intermittentblockage of the right nasal airwayand difficulty with air flowthrough the right nasal passage. Underlocal anesthesia, the oral and maxillofacialsurgeon elevated a fullthicknessmucoperiosteal flap over theright lateral aspect of the maxilla. Theprevious lateral window was used togain access into the base of the sinus. The window was enlarged, and a thoroughcurettage of the graft materialwas done. Multiple sinus polyps andgrafts material attached to the thickenedSchneiderian membrane wereremoved (Fig. 6). The sinus was thoroughlyirrigated, Thepatient showed remarkable improvement(Fig. 7) and was symptom free on a1-year follow-up. 16. Discussion17. literature review... discussion18. discussion with ENT prospect.... clinical study.. very good.... Have to do correction on poster. no cases reported for failure19. Twenty-six of the total 34 implants insertedfailed, of which 7 were displaced into the sinus. All patients had maxillary sinusitis, and 2 also had an inflammation ofother paranasal sinuses. Ten patients presented with an oroantral fistula.

Review of the files of the referring practitionerrevealed the preoperative presence of chronic maxillary sinusitis in 4 patients and an odontogenic cyst in 1. Caldwell-Luc operation served as the definitive surgical treatment. 20 n 21. normal article22. The implants placed in the augmented sinus were clinicallyhealthy and the implant-supported restorations had beenfunctioning successfully at 17 months after initial loading. Unexpectedly, the patient visited the dental clinic with thechief complaints of pain on biting in the upper right 2nd premolar(#15) since he had eaten hard food 3 days earlier. The#15 tooth was diagnosed as cracked and endodontic therapywas required. During endodontic therapy, a CT scan was takento locate the buccal canal of the tooth. Peri-implant radiolucencyin the apical portion of the implant placed in the augmentedmaxillary sinus was found by accident in the CT scanalthough a conventional (panoramic) radiograph revealed nosigns of peri-implant radiolucency (Fig. 9). This was after ahealing period of 32 months since sinus augmentation. Thefortuitously discovered radiolucent portion can be describedas incomplete bone formation or bone cavity in the augmentedmaxillary sinus. Nevertheless, the dental implants that were placed in the grafted sinus had been functioning wellafter prosthetic loading for more than 60 months and no enlargementof the bone cavity was found in follow-up radiographicviews (Fig. 10). The patient has had no subjectivesymptoms such as discomfort or pain in the #16i and 17i areaand has been receiving follow-up care on a regular basis. 24. A 43-year-old white man came to our privatepractice office with a chief complaint of amucosal trauma on the left posterior maxillaryregion caused by the prosthetic rehabilitationof movable overstructure, placed andloaded on dental implants 8 years ago. Acareful clinical examination showed

thedisappearance of an abutment on theposterior left side of the maxilla and theabsence of the implant from the same area, though the housing on the overdenture wasclearly seen. The conventional panoramicand Water’s radiograph revealed migrationof the dental implant into the left maxillarysinus, After the raise of an atraumatic buccal full-thickness flap and the the implant wasdetected under direct vision and removedwith forceps through the osseous window ofthe osteotomyThe histologic examination showed noinflammatory signs connected to the migratedimplant. The pathogenesis of migration of an implantinto the maxillary sinus is difficult to explain, but 3 probable mechanisms include thechanges in intrasinal and nasal air pressure, an autoimmune reaction to the implantcausing peri-implant bone destruction andcompromising the osseointegration, and abone resorption produced by an incorrectdistribution of occlusal forcesTreatment modalities for removal of amigrated dental implant initially included theconventional Caldwell-Luc (C-L) procedure, 1627. A 52-year-old woman was referred to us with a displaceddental implant in her left maxillary sinus. The left cheek had started to swell and serous dischargehad developed from the implant site a month before. Shepresented with pain in the cheek and a postnasal drip. Computedtomography (CT) of the paranasal sinuses showed a1 cm metallic foreign body, which was thought to be the dentalimplant (Fig. 1). Under local anaesthesia we approached itendoscopically through the middle meatus of the nasal cavity. 28. A 45-year-old systemically healthy femalepatient was referred to us with a displacedoral implant in her spheno-ethmoidal recess. The patient had undergone an implantplacement procedure 15 days back forthe substitution of the left upper first molarwith a screw-type oral implant. Despite the absence ofsymptoms, it was decided to

remove theimplant, to prevent potential obstructionor infectious complications of the sphenoidsinus. Under general anesthesia with orotrachealintubation, the patient underwentendoscopic removal of the displacedimplant via a transnasal approach29. A 44-year-old female presented with a two day history of unilateralfacial pain and a puffy left malar region. Two weeksbefore she had three osseointegrated implants screwed into theleft upper alveolus by her dentist for future use with a permanentdental plate as described by Branemark et al. (1977). Herupper alveolus had remained tender since insertion of theimplants and on examination was erythematous and swollenwith no sign of the implants. There was pus filling her left nasalcavity. Occipito-mental and lateral sinus X-rays (Figs. 1, 2)showed an opaque left maxillary antrum containing two dislodgedimplants. An orthopantomogram (Fig. 3) showed thethird implant in place but complete loss of upper alveolar bonelaterally where the other two implants had been inserted. Thethree implants were removed via a sublabial antrostomy withan extended buccal mucosal flap, the infected bone of theupper alveolus was curetted and an intranasal antrostomy wasfashioned. A mixed culture of Haemolytic Streptococci group Fand mixed anaerobes was grown from the aspirated pus; 30. 26 patients presented with displacedimplants in the maxillary sinuses. 1patient presented with an implant thatwas originally displaced in the maxillarysinus, but due to delay in treatment, underwent spontaneous migration towardthe sphenoid sinus and penetrated itsostium.