

CTMAX QUARTERLY

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BISPHOSPHONATE DRUG UPDATE: RECLAST

Bisphosphonate-related osteonecrosis of the jaws (BRONJ) has introduced another layer of complexity in managing the dental patient. When first described, much of the attention paid to this disease process involved the intravenously administered bisphosphonates. The IV formulations of bisphosphonate drugs, such as zoledronic acid (Zometa) and pamidronate (Aredia) have been associated with rates of ONJ as high as 12%. Subsequent literature described BRONJ in patients taking oral bisphosphonates, fortunately two separate groups have shown the prevalence of ONJ with oral bisphosphonates to be

less than 1%. While zoledronic acid is given intravenously, the drug has two formulations, Zometa and Reclast. While Zometa is given frequently and at high doses, Reclast is given once per year and has the same indications as the oral bisphosphonates such as Fosamax and Boniva. A study published in the New England Journal of Medicine (N Engl J Med 2007; 356:1809-1822 May 3, 2007) demonstrated that of the 3889 patients who received Reclast, only one patient experienced ONJ after a dental procedure during the 3 year study. There were no occurrences of spontaneous ONJ in the study. Unless

future research demonstrates different findings, your patients taking Reclast should be informed that their risk of ONJ after dental procedures is less than 1%, similar to the risk in patients taking the drug orally.



SPECIAL POINTS OF INTEREST:

- *What to do with patients taking Reclast.*
- *Are TMJ disorders still treated surgically?*
- *Which antibiotics are most appropriate for my patient?*
- *Should I discuss socket grafting prior to referring a patient for extraction of a site that will be restored with a dental implant?*
- *Will the surgeons attend to the emotional and behavioral needs of my pediatric patients?*

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THE CURRENT ROLE OF SURGERY IN TMJ DISORDERS

Nearly every field of dentistry participates in the evaluation of head and facial pain. Malocclusion and parafunctional habits such as clenching and bruxism are known causes of chronic microtrauma to the TMJ disk-ligament complex. This chronic microtrauma often

leads to clicking with function, and sometimes the clicking produces symptoms of pain and limited mandibular range of motion. Early intervention with the patient who has clicking and slight limitation of mouth opening can prevent more severe pain and dysfunction.

Occlusal splints, soft diets, NSAIDS and stretching exercises can convert a patient with clicking and pain with limited opening into a patient with little or no pain and an intermittent clicking. However, there are limits to these treatments. *See TMJ Surgery on page 2.*

TMJ SURGERY (CONTINUED FROM PAGE 1)



Clicking indicates a displaced TM disk. If the patient can open fully despite the clicking, the disk likely reduces to a nearly normal position. When a patient progresses from clicking to the absence of clicking with severely limited incisal opening (< 30 mm), they likely have an anteriorly displaced disk that does not reduce to its normal position.

The limits of non-surgical therapy should be acknowl-

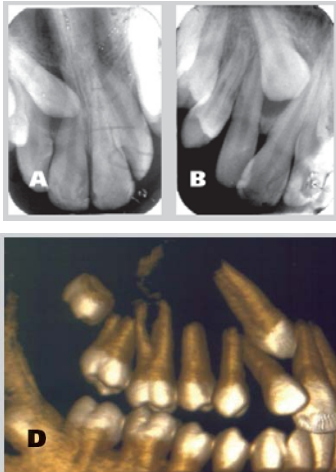
edged when a patient has progressive limitation of incisal opening and pain that persists despite conservative therapy.

While many surgeons have abandoned TMJ surgery for various reasons, arthroplasty continues to be the treatment for pain and dysfunction after the patient has failed medical and splint therapy. Referral of patients with advanced TMJ symptoms to a surgeon allows them to be informed of all of the treatment options

available to them.

While each area of dentistry can offer relief to patients suffering from TMJ disorders, only a multidisciplinary approach offers the patient a comprehensive treatment plan.

ADVANCED IMAGING FOR IMPACTED TEETH



In a supplement to JADA this month there is a supplement on Cone Beam imaging with two articles related to its application for orthodontic treatment. The images at the left are from that supplement [JADA 2010; 141 (suppl_3): 14S-18S]. As can be seen in the top images, two periapical films with a distal shift can be helpful in localizing impacted maxillary

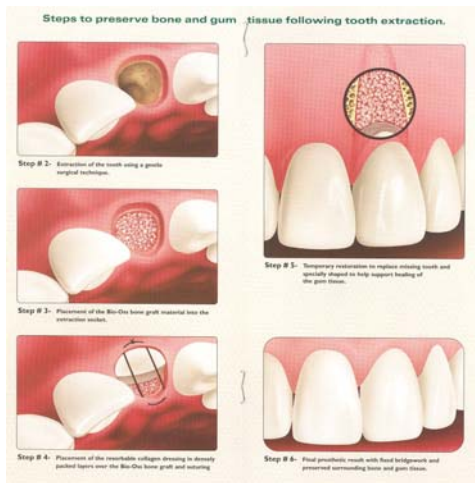
canines bucco-lingually. For routine cases where the position of the canine crown is easy to identify, plain films are more than adequate.

In cases where the canine crown is more difficult to localize, 3-D imaging with a Cone Beam CT scan can be a very helpful adjunct, not only for surgical planning but also for the

orthodontic-facilitated eruption of the tooth.

When patients are referred for exposure of these impacted canines, we have a Cone Beam CT scanner in our Simsbury office. Please specify on your referral letter if you would like your patient to have this imaging taken. We can provide a copy of the image to assist in the treatment of your patients.

RIDGE PRESERVATION ...FACT V. FICTION



Procedures to repair and grow new bone, unheard of just a few years ago, are now a routine part of dental surgical care. Tooth extraction is one of the most common dental procedures. Healing of the resulting socket normally occurs uneventfully. However, even with completely normal healing resorption of the surrounding bone

occurs. As the bone resorbs, so goes soft tissue. Resulting in a unpredictable height and width of the former alveolar ridge. As the technology of bone grafting has improved the maintenance of the ridge and predictability of subsequent implantation and preservation of ideal soft tissue contours has become the standard of care.

Antibiotic Selection for Odontogenic Infections

The penicillin family drugs are well-established in the treatment of odontogenic infections. With the penicillin-allergic patient, the selection of another antibiotic can sometimes require a little homework.

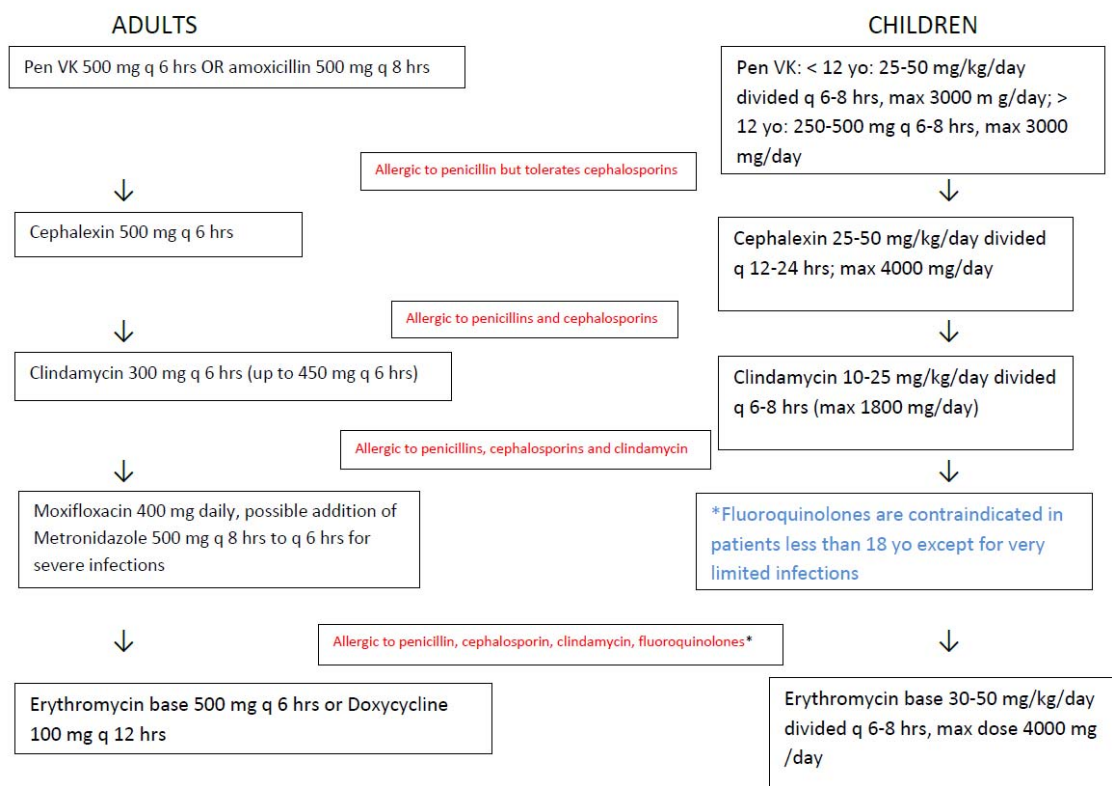
Ideally an antibiotic will be bactericidal, inexpensive and without side-effects that might decrease compliance. The orally administered penicillin family drugs meet these criteria. When allergic, patients can be prescribed clindamycin as a second line drug. Clindamycin is bacteriostatic, though some studies suggest that at high doses it is bactericidal. Clindamycin is its own class of drug

and despite a common misunderstanding, clindamycin is not a macrolide antibiotic (erythromycin, azithromycin etc.) and can be prescribed to patients with macrolide allergy.

After penicillin and clindamycin the choices can be less obvious. Cephalosporins work well but should be prescribed with caution in patients who are penicillin allergic due to a 10% cross-reactivity of penicillins and cephalosporins. Many providers prescribe macrolide antibiotics for odontogenic infections. The macrolides are poor choices and should be prescribed as last resort drugs. The Zpac is often prescribed for numerous ailments and it

treats most odontogenic infections poorly. A much better choice for adult patients is a fluoroquinolone antibiotic as the susceptibility for odontogenic infections is excellent and the quinolones are bactericidal. In more severe infections, metronidazole should be added to a fluoroquinolone to ensure adequate anaerobic coverage. Remember that metronidazole will produce an Antabuse-like effect if the patient drinks alcohol.

In children less than 18 years old, quinolones are contraindicated due to increased risks of adverse reactions related to joints and surrounding tissues. The macrolide antibiotics would be an appro-



The above medication information is from Epocrates and can be further researched at www.epocrates.com.



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Our Mission Statement

All of us at **Connecticut Maxillofacial Surgeons, LLC**, are dedicated to the highest quality of care in the specialty of Oral and Maxillofacial Surgery. We take pride in providing contemporary clinical care in a full scope of the specialty as well as serving in a leadership capacity for the future of our specialty on both a local and national level. CMS, LLC can truly be described as a unique group of service-oriented professionals whose aim is to provide the highest level of patient care in combination with a maximum of comfort, sensitivity, and compassion for each and every individual.

Through our presence on the Internet we hope to move beyond the realm of merely providing clinical care in the classic sense. First and foremost, we would like to further close the information gap between us and our patients. A more ambitious intent would be to not only fulfill a regional endeavor but also provide a broader understanding of our specialty on a global level. Through a depth of experience and resources that we possess as a group, we hope to provide an ever increasing knowledge base accessible by all of those with any interest.

Definition of Oral & Maxillofacial Surgery:

Oral and Maxillofacial Surgery is a medical and dental specialty of surgery which involves the diagnosis, surgery and adjunctive treatment of diseases and defects involving both the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial region. (American Dental Association) More simply put in layman's terms, the oral and maxillofacial surgeon is the orthopedic surgeon of the facial region. He or she is an individual who addresses problems ranging from the removal of impacted teeth to the repair of facial trauma. He or she may be a doctor you would visit to:

- Have a [tooth extraction](#).
- Have teeth replaced by having [dental implants](#) inserted.
- Have oral surgical procedures performed in the office under outpatient [ambulatory anesthesia](#).
- Have a [jaw cyst or tumor](#) diagnosed, removed and reconstructed.
- Have your jaw aligned with [orthognathic surgery](#).
- Have you jaw joint repaired with [TMJ surgery](#).
- Have [jaw reconstruction](#) following cancer surgery.
- Have your facial bones realigned after [facial trauma](#).

MEET THE STAFF: THE SIMSBURY OFFICE

Simsbury : The Simsbury Office can be found on Hopmeadow St. where it is located just up from Weatogue and prior to the center of Simsbury. Located in the beautiful New England, Town of Simsbury, it is easily accessible and known to some Simsbury locals as the old Simsbury Elementary School, at 507 Hopmeadow St (RT 10/202). Simsbury is currently the Corporate Headquarters for Connecticut Maxillofacial Surgeons, L.L.C. Feel free to call us in Simsbury Office at **860.658.0446**.



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