College of Dental Surgeons of Saskatchewan
Guidelines for the General Practitioner for the
Management of Patients with Temporomandibular Disorders(TMDs)

In the management of patients with temporomandibular disorders (TMDs), the General Practitioner dentist should:

1. Recognize the evolution of an etiological theory towards a biopsychosocial/medical model and away from a traditional dental framework.

2. Manage TMD pain utilizing conservative, non-invasive, reversible and evidence-based approaches, encouraging rehabilitation, rather than providing an unrealistic expectation of a permanent cure. Management modalities should be directed at the pathophysiological process of joint and muscle pain as well as the psychosocial aspects of chronic pain, customizing management to each patient's individual problems.

3. Recognize the possible existence of comorbidities, with other systemic disorders producing multiple symptoms in susceptible patients. In such patients, it should be realized that TMDs may be only a subset of musculoskeletal pain conditions requiring a medical perspective for management.

4. Understand that there is substantial evidence that in many cases, clinical remission of TMD symptoms occurs without treatment or with only self-care-instructions.

5. Understand that asymptomatic tempormandibular joint (TMJ) noises receive no demonstrable value from treatment.

6. Understand that the concept of routine irreversible alteration of the patient's TMJs, jaws, occlusion or dentition by oral appliances is not validated by well-controlled, well-designed scientific research and if such appliances are to be considered, patients must be made well aware of this, along with a signed informed consent indicating that there is no scientific support for their use, and that reversible treatment can be equally effective for relieving pain and dysfunction.

7. Understand that prior to proceeding to a more aggressive, potentially irreversible treatment, proof of exhaustion of conservative, non-invasive, reversible and evidence-based approaches must be clearly demonstrated and well chronicled within the patient's treatment notes. A clear, signed informed consent indicating that the patient fully understands the complete implications and potential complications must be obtained prior to initiation of treatment. In addition, the patient must understand that failure to manage signs and symptoms with conservative, non-invasive, reversible and evidence-based approaches does not imply or guarantee success with a more aggressive technique.

8. Understand that an inability to identify precise etiologies and pathophysiological processes or the lack of a perfect theoretical model does not prevent the rendering of reasonable and effective management approaches.

9. Understand that the College of Dental Surgeons of Saskatchewan finds it acceptable in the management of patients with temporomandibular disorders to provide, if necessary, a presumptive diagnosis that is probably correct and to deliver only conservative, non-invasive, reversible and evidence-based approaches.

10. Understand that with complex, multifaceted, multimodal TMJ/head, face and neck pain, a referral for consultation and/or treatment should be made to a specialist in the field of, or any combination of, Oral Medicine, Oral and Maxillofacial Surgery, Prosthodontics and Orthodontics or appropriate medical-specialities.

11. Understand that not all TMJ/head and/or neck pain is related to TMDs and that odontogenic pain and other pathologies should always be ruled out.

12. Understand that if symptoms and clinical findings from head and/or neck pain are not entirely consistent with TMDs or if the patient's pain is not responding to conservative, non-invasive, reversible and evidence-based approaches, a referral should be made to one of the specialists above.

13. Understand that TMJ imaging is considered a special investigation and may be indicated as evidence for the initial diagnostic work-up of a patient, based on clinical signs and symptoms. Initial or additional TMJ imaging may also be indicated if a patient is unresponsive to initial conservative, non-invasive, reversible and evidence-based approaches and is warranted based on the clinical signs and symptoms. The standard of care to potentially screen for or identify gross osseous change of the TMJs is panoramic radiography. Consultation with and/or referral to an appropriate radiologist is recommended when the radiographic investigation is not normally performed in a dental office (e.g., computed tomography for detection of osseous changes and MRI for the morphologic condition and position of the TMJ disc) in order that procedures can be undertaken with the most efficacy while yielding the most useful information.

In summary, the process of achieving a diagnosis utilizing scientifically based measures and methods should be implemented prior to initiating conservative, non-invasive, reversible and evidence-based strategies that may include the following:

1) Patient education, reassurance and self-care.
2) Pharmacologic therapy, including, but not limited to anti-inflammatories, analgesics and muscle relaxants.
3) Physical therapy, as directed by a qualified physical therapist.
4) Oral appliances (for example, full-arch coverage, flat-plane stabilization) that do not produce any irreversible changes to the dentition or the jaws.
5) Behavioural/psychological therapy, provided by appropriately qualified practitioners.

Failure to achieve relief with the above options will necessitate a referral to the above specialities for further consulting, evaluating, investigating and/or treatment.

References

1) Gary Klasser and Charles Greene, Oral Appliances in the Management of Temporomandibular Disorders, OOOOE Vol 107, No.2, February 2009, pgs 212-223
2) Gary Klasser and Charles Greene, The Changing Field of Temporomandibular Disorders: What Dentists Need to Know, J Can Dent Assoc Vol 75 No 1, February 2009, pgs 49-53
3) Royal College of Dental Surgeons of Ontario, Guidelines, Diagnosis & Management of Temporomandibular Disorders & Related Musculoskeletal Disorders, Revised July 2009
4) Temporomandibular Disorders: An evidence-based approach to diagnosis and treatment. Edited by DM Laskin, CS Greene, WL Hylander. Quintessence Publishing Co, Inc.,- 2006
5) Imaging of the temporomandibular joint: A position paper of the American Academy of Oral and Maxillofacial Radiology, OOOOE, Vol 83(5), May 1997, pp 609-618
6) AADR TMD Policy Statement Revision/Approved by AADR Council 3/3/2010
7) Greene CS, Klasser GD, Epstein JB. Revision of the American Association of Dental Research's Science Information Statement About Temporomandibular Disorders. J Can Dent Assoc. 2010; 76:a115
8) American Academy of Orofacial Pain, Orofacial pain: guidelines for assessment, diagnosis and management. deLeeuw R, editor. 4th ed. Chicago: Quintessence; 2008
9) DeBoever JA, Nilner M, Orthlieb JD, Steenks MH. Recommendation by the EACD for examination, diagnosis, and management of patients with Temporomandibular disorders and orofacial pain by the general practitioner. J Orofac Pain. 2008:;22 (3): 268-78.

APPENDEX 1
INFORMED CONSENT

Name
Address
Phone Number

TMD Treatment Options and Informed Consent

Patient name: _____

The treatment of temporomandibular disorders (TMD) can involve many different techniques and healthcare practitioners. Depending on a patient's individual symptoms and history, treatment recommended may include, but is not limited to physiotherapy or dental occlusal splint therapy.

Dr. _____is a general dentist with considerable training in the diagnosis and treatment of TMD. No specific certified TMD specialty exists. Certified specialists including those in Neurology, Oral Medicine, Oral Pathology, Oral and Maxillofacial Surgery, Prosthodontics, Periodontics and Orthodontics are available for consultation. A referral to one or more of these specialists may be warranted. Should you choose to seek a second opinion from a specialist, an appointment can be arranged for you. You may request a referral to a specialist at any point during treatment.

The over-riding principle in the treatment of temporomandibular disorders (TMD) is the concept of pain management rather than pain elimination or cure. Expectations for any treatment resulting in outright elimination of pain may not be realistic.

Conservative or reversible methods of treatment may be as successful in reducing and controlling symptoms as more invasive treatments. It is therefore wise to attempt the most conservative treatment options reasonably available and only progress to more invasive treatment if initial treatment yields an unsatisfactory result. It should also be understood that failure of initial conservative methods to manage TMD does not guarantee success with a more aggressive technique**. It should also be noted there is no present scientific evidence that validates aggressive, irreversible TMD treatment.**

Diagnostic Records: Radiographs and Photographs

Prior to proceeding with any dental splint therapy, records are advised including trans-cranial radiographs, panoramic radiographs and photographs of your teeth. Radiographs may be forwarded to an Oral and Maxillofacial Radiologist(specialist in Radiology) for interpretation**. The trans-cranial view is not routinely used or scientifically recommended for use by general dentists but it may be preferred by Dr. _____to assess the position of the lower jaw relative to the skull.** Though radiographs may be recommended, they should only be taken with your consent. You may refuse any radiographs.

TMJ Records: trans-cranial and panoramic radiographs, digital photographs
Payable at time of appointment **$_____**

Radiologist report: Payable at time of appointment $_____

Phase I treatment (Initial splint)

Please note diligent oral hygiene and regular cleanings at your Dentist's office are required during Phase I TMJ treatment to prevent decay and gum disease.

A variety of splints are used in our office. Initially a flat-plane hard plastic splint may be used. A variation of this splint called a *Farrar* splint may be recommended for use at night. Both of these appliances are considered non-invasive and reversible treatment as no bite change is either expected nor anticipated. If two appliances are recommended, a lab fee only (no professional fee) will be charged for the second appliance.

Please note if a new injury occurs during the initial treatment, a new treatment plan and timeline for healing will need to be discussed.

Phase I TMJ Treatment: Professional fee – impressions for splint
Payable at time of appointment **$_____**

When TMJ records and impressions are taken on the same appointment, fee payable at the time of the appointment will be $_____.

Lab Fee: (per splint) Payable at delivery of splint appointment **$_____**
If your TMJ splint is lost or damaged we will repair or replace it once for a lab fee only. If your appliance must be repaired or replaced a second time both a lab fee and professional fee will be charged.
An appointment, usually after six weeks of delivery of the splint, is scheduled to assess your response to initial treatment. This is called a follow-up assessment.

Follow-up assessment: **$_____**

If you are satisfied with the management of your TMD symptoms at this point, no further visits are required.

Phase I Treatment (Mandibular advancement)

If you have already tried conservative splint treatment with another provider and following assessment of the splint without adequate symptom moderation, or if you would like to try more aggressive techniques in an attempt to manage your TMD symptoms, alternative splint treatment may be advised. This also is considered Phase I splint treatment. (no bite change is anticipated)

A jaw-repositioning splint may be used with the goal of re-aligning or stabilizing the jaw. This type of treatment is initially reversible as well, but long-term use may lead to irreversible changes thereby inevitably leading to Phase II treatments and costs as outlined below. Possible risks include, but are not limited to; altered bite and speech, tooth decay, gingivitis and periodontal disease. Long-term use of an appliance can intrude teeth and virtually commit the user to further treatment (Phase II treatment as described below). The recapture of a displaced TMJ disc may be ideal, but may not always be possible. Elimination of joint sounds and/or pain through treatment may not be permanent.

When a splint that carries increased risk of irreversible changes is used, monthly follow-up appointments are mandatory. It is a good idea to assess symptoms at three to four months after beginning use of such an appliance. Intrusion of teeth is unlikely in that time frame, and treatment can be discontinued at this point with no alteration to your bite and no further cost incurred if you have noted no benefit thus far.

Phase I TMJ Treatment: Professional fee – impressions for splint
Payable at time of appointment $_____
Lab Fee: (per splint) Payable at delivery of splint appointment $_____

Professional fee for monthly visits: (scheduled usually on a monthly basis)
_____ to _____ monthly splint checks at **$_____**

After wearing the re-positioning splint, and before permanent alterations to your jaw or teeth are made, an attempt to wean you off your splint is advisable. If symptoms recur upon weaning, a second phase (Phase II) of treatment may be discussed and considered.

Phase II Treatment

A second set of study records (orthodontic records) is required for phase II treatment planning. A records fee $_____will be applicable at that time.

Phase II treatment may involve one of, or any combination of the following:

_____New complete or new partial dentures or new over-dentures $_____ - $_____
_____Crown and bridge treatment (cost varies depending on extent, but the estimate fee for a single crown is $_____, and your treatment may involve several, if not all of your teeth.)
_____Dental implants (can range from $_____-$_____each)
_____Orthopedic/Orthodontic treatment (can range from$_____-$_____)

The decision to proceed with or discontinue any treatment is the patient's alone. We will attempt to inform you of your options and potential risks regarding treatment.
I understand **no guarantees or assurances** as to the outcome of treatment can be made. The TMJ (jaw joint) is complex and subject to factors (postural, muscular, degenerative and recuperative) that may be beyond a clinician's control. The complete elimination of all symptoms is not always possible.

_____ _____ _____
Dentist Treatment Coordinator Patient

_____
Date