Prosthetic Management of TMJ Disorders

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Prosthetic Management of TMJ Disorders

Overview

Theory:
- Examination

Discussion:
- Treatment
What is TMD?

- Tempromandibular disorders cover wide range of conditions.
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- They can affect any part of the articulatory system, which consists of the TMJ, the muscle of mastications and the occlusion.
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- They can affect any part of the articulatory system, which consists of the TMJ, the muscle of mastications and the occlusion.
- Any problem that affect one of those parts is likely to affect the others.
- Sign and symptoms may include preauricular or facial pain, restriction or alteration of the range of mandibular movement, muscle pain that is worse with function, localized jaw joint pain, jaw joint sounds such as clicking or crepitation, unexplained tooth sensitivity, tooth or restoration fracture, and chronic daily headache.
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- Can affect up to 70% of population. Around 20% develops symptoms, the rest can be subclinical. Only 5% seeks treatment!!
TMD Signs & Symptoms

- Examination
- Patients’ Complaints
- Treatment
Patients’ Complaints

- Clinically
- Locked Joint
- Dislocated Jaw
- Clicking Joint
- Worn Teeth
- Facial Pain
- Headache
Patients’ Complaints

Clicking Joint
Patients’ Complaints

Clicking Joint
Patients’ Complaints

Clicking Joint

Closed  Partially open  Fully open
Patients’ Complaints

Clicking Joint

Closed
Partial open
Fully open

Closed
Partial open
Fully open
Patients’ Complaints

Clicking Joint

Disc displacement with reduction
Patients’ Complaints

- Facial Pain
- Headache
- Locked Joint
- Clicking Joint
- Dislocated Jaw
- Worn Teeth
Patients’ Complaints

Locked Joint
Patients’ Complaints

Locked Joint
Patients’ Complaints

Locked Joint

Closed  Partially open  Fully open
Patients’ Complaints

Locked Joint

Closed  Partially open  Fully open

Closed  Partially open  Fully open
Patients’ Complaints

Clinically

Locked Joint

Disc displacement without reduction

Saturday, 15 March 14
Patients’ Complaints

- Facial Pain
- Headache
- Locked Joint
- Clicking Joint
- Dislocated Jaw
- Worn Teeth

Clinically
Patients’ Complaints

Clinically

Dislocated Jaw
Patients’ Complaints

Clinically

Dislocated Jaw
Patients’ Complaints

Clinically

Dislocated Jaw

Saturday, 15 March 14
Patients’ Complaints

Clinically

Dislocated Jaw

Saturday, 15 March 14
Patients’ Complaints

- Facial Pain
- Headache
- Locked Joint
- Clicking Joint
- Dislocated Jaw
- Worn Teeth
Patients’ Complaints

Worn Teeth
Patients’ Complaints

Worn Teeth

Clinically
Patients’ Complaints

- Facial Pain
- Headache
- Locked Joint
- Clicking Joint
- Dislocated Jaw
- Worn Teeth

Clinically
Patients’ Complaints

Facial Pain

Headache
Patients’ Complaints

- Facial Pain
- Headache
Patients’ Complaints

Facial Pain

Headache

Muscle Tone

Muscle Fatigue
Examination

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Examination

- Range of Motion
- Pathway of Jaw Opening
- Midline
- TMJ Tenderness
- Masticatory Muscle Tenderness
- Joint Sounds
Examination

Range of Motion
Examination

Range of Motion

Saturday, 15 March 14
Examination

Clinically

Range of Motion

35-42 mm

8 mm

Saturday, 15 March 14
Examination

- Range of Motion
- Pathway of Jaw Opening
- Midline
- TMJ Tenderness
- Masticatory Muscle Tenderness
- Joint Sounds
Examination

Pathway of Jaw Opening
Examination

Pathway of Jaw Opening

Straight pathway

Transient deviation

Diagonal

Lasting deviation
Examination

- Range of Motion
- Pathway of Jaw Opening
- Midline
- TMJ Tenderness
- Masticatory Muscle Tenderness
- Joint Sounds

Saturday, 15 March 14
Examination

Midline
Examination

Midline
Examination

Clinically

Midline

Saturday, 15 March 14
Examination

- Range of Motion
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Saturday, 15 March 14
Examination

Clinically

TMJ Tenderness
Examination

TMJ Tenderness

Saturday, 15 March 14
Examination

Clinically

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- Range of Motion
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Examination

Clinically

Masticatory Muscle Tenderness
Examination

Masticatory Muscle Tenderness
Examination

Masticatory Muscle Tenderness

Clinically

Masseter

Temporalis

Lateral pterygoid
Examination

- Range of Motion
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Saturday, 15 March 14
Examination

Joint Sounds

Saturday, 15 March 14
Examination

Joint Sounds
Examination

Joint Sounds
Management of TMD
Management of TMD

- Physiotherapy
- Prosthetic
- Medication
- Surgical
Management of TMD

Prosthetic
Prosthetic Management of TMD

It will provide the patient with an improved occlusion and break any parafunctional habits when he/she wears it, which will lead to relaxation of the muscles and the TMJ.
Prosthetic Management of TMD

Splints
Prosthetic Management of TMD

Anterior Repositioning Splint
- The anterior repositioning splint (ARPS) is a full-coverage splint constructed on the lower arch, which guides the mandible downwards and forwards into a protrusive position to correct the disc condyle incoordination.
- The aim of the splint is to place the mandible into a new protrusive position for a therapeutic period of time, usually 3 continuous months.

Maintaining
Prosthetic Management of TMD
Prosthetic Management of TMD

Splints

Fabrication

- CLINIC: Primary impression for both arches, Bite and Facebow record
- LAB: constructs FULL ARCH COVERAGE HARD ACRYLIC splint
- CLINIC: Fit it (reline if needed) then adjust the occlusion
Patients’ Complaints

- Facial Pain
- Headache
- Locked Joint
- Clicking Joint
- Dislocated Jaw
- Worn Teeth
The End