The condyle becomes locked when it has extended too far forward (in relation to the eminence) and spasm of the pterygoid and masseter muscles prevent it from moving back.

Associated spasm and oedema produce extreme discomfort and anxiety for a patient who can't speak because they are unable to close their mouth.

**Risk factors**

- Shallow mandibular fossa in the temporal bone
- Weak or torn temporo-mandibular joint (TMJ) ligaments
- Underdeveloped condyle of the mandible
- Connective tissue diseases, e.g. Marfan's syndrome or Ehlers-Danlos syndrome
- Neuroleptic use (orofacial spasm)\(^1\)

**Presentation**

- Anatomical abnormality of the fossa/interior articular eminence.
- Dislocation can occur bilaterally, or unilaterally, with jaw locked open symmetrically or deviating to one side (opposite to dislocation).
- Palpation shows TMJ anterior to the articular eminence.
- Usually occurs during maximum opening of mouth, e.g. during yawning, laughing, prolonged dental work or an epileptic seizure.
- May also be secondary to trauma.

**Investigations**

X-ray of jaw to exclude fracture in dislocation.

**Management**

Relief of pain and muscle spasm with IV benzodiazepine ± opioid and/or direct injection of local anaesthetic into condylar area.

- Face patient and grasp the mandible with one hand on each side of the jaw with thumbs facing the occlusal surfaces of the posterior teeth (need to protect thumbs with thick wrapping of gauze or tongue depressors wrapped in gauze).\(^2\)
- Place fingertips around inferior border of mandible (near the angles) and steadily and slowly, apply pressure to free the condyles.
- Then press the chin backwards and close the mouth, so the condyle returns to the correct position in the fossa.

NB: The jaw may snap back suddenly, so thumb protection is important!
Patients should eat a soft diet for one week.
Avoid wide opening of mouth; place fist under chin when yawning.
Prescribe analgesics and muscle relaxants. Local heat may offer relief.
In recurrent cases, two equally efficacious procedures may be used; either eminectomy or siting a miniplate on the articular eminence.
Refer to oral or maxillofacial surgeon for follow-up.

Further reading & references

- Caminiti MF, Weinberg S; Chronic Mandibular Dislocation: The Role Of Non-Surgical and Surgical Treatment

2. MERCK. Mandibular Dislocation; Good diagram

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