Temporomandibular joint dislocation during transoesophageal echocardiography: An unusual complication

Luxation de l’articulation temporomandibulaire durant une échographie transesophagienne : une complication rare

Nicolas C. Roche*, Philippe Paule, Laurent Fourcade

Service de cardiologie, hôpital d’instruction des armées A.-Laveran, 34, boulevard Laveran, 13384 Marseille, France

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TMJ dislocation is an unusual complication of TEE. We report a case of bilateral TMJ dislocation in a 70-year-old man prior to direct current cardioversion for atrial fibrillation. Shortly after TEE, the patient complained of bilateral facial pain and difficulty with speech; his mouth was left permanently open with his chin lowered and thrown forward (Fig. 1). The examination found an empty glenoid fossa of the TMJ in both sides. The diagnosis of TMJ dislocation was established and the reduction was performed by maxillofacial surgery without sedation.

TMJ dislocation is defined as the loss of the normal anatomical relationship between the mandibular condyles and the temporal glenoid fossa. Risk factors predisposing to this dislocation include conditions such as dimorphism, algodysfunctional syndrome of the mastication apparatus and past history of dislocation. TMJ dislocation occurs most often after an effort of yawning or in cases of voluntary forced opening of the mouth, such as during the TEE probe introduction.

The manual reduction of the dislocation by Nelaton’s manoeuvre (Fig. 2) must be performed as promptly as possible. Late diagnosis of this complication requires anaesthesia to allow manual reduction. Only in the case of failure to reduce must a surgical approach to the joint be attempted.

Abbreviations: TEE, transoesophageal echocardiography; TMJ, temporomandibular joint.
* Corresponding author.
E-mail address: nicolascharlesroche@gmail.com (N.C. Roche).
Figure 1. Diagnosis of temporomandibular joint dislocation. (A) Bilateral facial pain, difficulty with speech, mouth permanently opened. (B) Empty glenoid fossa (white arrow) of the temporomandibular joint in both sides.

Although very uncommon, physicians should be aware of the risk of TMJ dislocation during TEE and should know how to manage it.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

Figure 2. Nelaton’s manoeuvre. The operator places the pads of his thumbs on the molars of the patient with his fingers hooked around the mandibular angle. After obtaining sufficient patient relaxation, the operator exerts a gentle and steady pressure directed downward (1) and exaggerates mouth opening (2); this thus facilitates the manoeuvre by gently pushing the mandible backwards to reintegrate the heads in the condylar glenoid (3).