

## **PO.02.38 ULTRASONOGRAPHY ROLE FOR DIAGNOSIS OF TEMPOROMANDIBULAR JOINT DISORDERS**

Umberto Garagiola, Paolo Cressoni, Irene Borzani  
*University Study of Milan, Milan, Italy*

**doi:10.12889/2014\_AB00175**

### **Aim**

The aim of this study is to show the importance and reliability of ultrasonography (US) in the diagnosis of the temporomandibular disorders (TMJ) in patients affected by orofacial pain and dysfunction with dentofacial and skeletal malocclusions.

### **Materials and methods**

30 patients have been assessed by ultrasonographic exams. US was performed with a 11-18 MHz linear transducer. US offers specific advantages because it is non-invasive, does not require sedation or general anesthesia (which facilitates examinations for follow-up), is quickly accessible bedside, and is easy to combine with clinical assessment (interactivity). Agitation of the patient is rarely a problem, as MRI and multiple locations can be assessed during a single session. Furthermore, modern high-frequency US transducers used by experienced US examiners can provide unsurpassed resolution of the superficial musculoskeletal structures.

### **Results**

Were detected morphological alterations and positions of mandibular condyles in the glenoid fossa, condylar synovitis, disc displacement and joint effusion.

### **Conclusions**

Ultrasonography is a noninvasive and inexpensive diagnostic procedure that can be suggested for the evaluation of TMJ disorders, with particular accuracy in the detection of disc displacement and joint effusion. Limitations are especially related to the scarce accessibility of the medial part of the TMJ structures, and the need for trained and calibrated operators.

**How to cite this article:** Garagiola U, Cressoni P, Borzani I. Ultrasonography Role for Diagnosis of Temporomandibular Joint Disorders. *EJCO* 2014;2 (Suppl.1):doi:10.12889/2014\_AB00175