

## **Immunohistochemical Expression of Collagen Type IV Antibody in the Articular Disc of the Temporomandibular Joint of Human Fetuses**

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### SUMMARY

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The objective of this paper was to study the morphology of the articular disc and analyze the immunohistochemical expression of the marker of type IV collagen in the articular disc of the temporomandibular joint (TMJ) of human fetuses of different gestational ages. Twenty TMJ from human fetuses aging from 21 to 24 weeks of intrauterine life were studied. The TMJ were supplied by the Federal University of Uberaba. The ages of the fetuses were determined by measuring the crown-rump length (CRL). Macroscopically, the fetuses were fixed in a formalin solution at 10% and dissected by removing the skin and the subcutaneous tissue, exposing the deep structures. An immunohistochemical marker of type IV collagen was used in order to characterize the presence of blood vessels in the central region of the temporomandibular joint disc. Analysis of the immunohistochemical marker of type IV collagen showed the presence of blood vessels in the central region of the temporomandibular disc in human fetuses.

### INTRODUCTION

The temporomandibular joint (TMJ) is a set of anatomical structures that, together with a group of special muscles, allows the mandible to carry out many movements during mastication (Gardner et al., 1988; Latarjet and Ruiz Liard, 1993; Figún and Garino, 1994; Berkovitz et al., 2004; Sabú et al., 2005; Sabú et al., 2006; Moore and Dalley, 2007).