

Far Lateral Approach

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Abstract. The far lateral approach is an inferolateral extension of the lateral suboccipital approach. Designed for clipping of the aneurysms of the vertebrobasilar junction and proximal segments of the posterior inferior cerebellar artery, it became over the years a workhorse approach for ventral foramen magnum meningiomas and other intradural lesions located anterior to the dentate ligament. This article summarizes the technical key aspects of the far lateral approach and transcondylar, supracondylar, and paracondylar extension. (www.actabiomedica.it)

Key words: Far-lateral approach; Foramen magnum; Jugular tubercle; Occipital condyles; Posterior-Inferior cerebellar artery; Transcondylar Approach.

Introduction

The far lateral approach was described by Roberto Heros in 1986 (1). It consists of an extension further lateral of the lateral suboccipital approach where drilling of the posterolateral aspect of the foramen magnum (FM) and C1 hemilaminectomy tremendously increases the working space in front of the brainstem, thus eliminating the need for retraction. This route has unquestionable advantages in exposing the intradural vertebral artery (VA), the vertebrobasilar junction (VBJ), the proximal segment of the posterior inferior cerebellar artery (PICA), and anterolateral variant of the medulla oblongata and the upper cervical cord. The far lateral approach also involves a transcondylar, supracondylar, or paracondylar extension with a further increase in the working space at the anterior border of the FM, jugular tubercle (JT) area, and posterior edge of the jugular foramen (JF), respectively.

Because of this wide versatility, the far lateral approach is today considered as a pillar among the approaches to the posterolateral skull base.

This article overviews the surgical technique of the far lateral approach and transcondylar, supracondylar, and paracondylar extension.

Indications

The far lateral approach is indicated for those lesions lying in front of the dentate ligament between the lower third of the clivus and the superior aspect of the body of C2 (2). Extra-axial lesions of this area involve the premedullary and lateral cerebellomedullary cistern. They are ventral FM meningiomas, aneurysms of the V4 segment of the VA, VBJ, and anterior and lateral medullary segment of the PICA, schwannomas of the lower cranial nerves, and arteriovenous malfor-