Transcallosal anterior interfoniceal approach

The Rosenfeld, or transcallosal anterior interfoniceal (TAIF), approach was first introduced in 2001.

It consists of a small callosotomy followed by the midline transseptal dissection of the fornix to enter the roof of the third ventricle. The aim of this microsurgical anatomy study is to describe and show each stage of the surgical procedure, focusing on the possible trajectories to anatomical landmarks.

A total of 20 adult cadaveric specimens were used in a study. Using ×3 to ×40 magnifications, the surgical dissection was performed in a stepwise fashion, and the transcallosal anterior interforniceal approach was performed, analyzed, and described. Results In 5 specimens of 10, a cavum septum pellucidum was depicted. In 5 cases of 20 after the callosotomy, the lateral ventricular cavities were reached. Different orientation of the microscope allowed to define three surgical trajectories to visualize the region of interest without exposing important functional areas.

The TAIF represents a minimally invasive approach to the third ventricle; its tricky surgical steps make appropriate anatomical dissection training essential to become confident and skilled in performing this approach.