

Chapter 3

SURGICAL APPROACHES TO THE PINEAL REGION

Ali YILMAZ¹

INTRADUCTION

Surgical strategy varies not only according to anatomic reasons but also according to the nature and characteristics of the pathology. Applications for pathologies in the pineal region are total cure, biopsy resection, or medical treatment.

Since the beginning of the 20th century, the anatomical structure, pathological findings, surgical approach and surgical techniques of the pineal gland have been examined.

The interhemispheric transcallosal approach to the pathologies of the pineal gland was first described in 1923 and was modified by Dandy in 1920 (1). Until the 1930s, surgical interventions to the pineal region were thought to be dangerous because of insufficient anatomical knowledge, lack of experience, inability to use the operating microscope and adequate lighting problems (2). Van Wagenen described a transcortical transventricular approach from the right parietal lobe and right lateral ventricle. Horrax reported that occipital lobe resection was a convenience for larger tumors, by making a change in Dandy's approach (3,4). In the 1960s, Poppen described the first occipital transtentorial approach, radiotherapy was the first-line treatment. In 1971, Stein published his 9 cases, that operated with an infratentorial suprac-

1 Assistant professor, Ordu University, draliyilmaz19@gmail.com

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