

## Pineal Gland & Papillary Tumor on Pineal Gland

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The pineal organ, conarium, or epiphysis cerebri, may be a little endocrine organ within the brain of most vertebrates. The pineal organ produces melatonin, a serotonin-derived hormone which tweaks rest designs in both circadian and regular cycles. The shape of the organ takes after a pine cone, and gives it its title. The pineal organ is found within the epithalamus, close the center of the brain, between the two sides of the equator, tucked in a groove where the two parts of the thalamus join. The pineal organ is one of the neuroendocrine secretory circumventricular organs in which capillaries are for the most part porous to solutes within the blood.

About all vertebrate species have a pineal organ. The foremost important exemption may be a primitive vertebrate, the hagfish. Indeed within the hagfish, be that as it may, there may be a "pineal comparable" structure within the dorsal diencephalon. The lancelet *Branchiostomala lanceolatum*, the closest existing relative to vertebrates, too needs a recognizable pineal organ. The lamprey (another primitive vertebrate), in any case, does have one. A number of more created vertebrates have misplaced pineal organs over the course of their advancement.

The essential work of the pineal organ is to deliver melatonin. Melatonin has different capacities within the central apprehensive framework, the

foremost imperative of which is to assist balance rest designs. Melatonin generation is stimulated by obscurity and restrained by light. Light touchy nerve cells within the retina distinguish light and send this flag to the suprachiasmatic core (SCN), synchronizing the SCN to the day-night cycle. Nerve filaments at that point transfer the sunshine data from the SCN to the paraventricular cores (PVN), at that point to the spinal rope and by means of the thoughtful framework to prevalent cervical ganglia (SCG), and from there into the pineal organ [1-3].

The ordinary pineal organ secretes melatonin and is found within the supratentorial midline, over the prevalent colliculi and underneath the vein of Galen. Tumors of the pineal locale account for <1% of intracranial neoplasms in grown-ups. Essential tumors of the pineal locale incorporate pineal parenchymal neoplasms, germ cell neoplasms, and tumors emerging from adjoining structures, counting meningiomas, astrocytomas, and ependymomas. Pineal parenchymal tumors incorporate the generally sluggish pineocytoma and the profoundly dangerous pineoblastoma. Both of these substances show up as lobular, enhancing masses centered within the pineal organ that uproot the typical pineal calcifications peripherally [4].

Germ cell tumors incorporate germinoma and teratoma. Pineal sores are considered a typical finding, happening in up to 40% of patients. When they happen within the pineal locale, dermoid and epidermoid blisters picture so also to those that happen somewhere else within the central anxious framework. Metastases to the pineal organ frequently result from essential tumors of the lung, breast, colon, and kidney.

### References

1. Smith AB., et al. Lesions of the pineal region: radiologic-pathologic correlation. *Radiographics*. 30 7 (2010): 2001–2020.
2. Chang AH., et al. MR imaging of papillary tumor of the pineal region. *AJNR Am J Neuroradiol*. 29 (2008): 187–189.
3. Kim YH., et al. Papillary tumor of pineal region presenting with leptomeningeal seeding. *Neuropathology*. 30. 6 (2010): 654–660.
4. Kaloshi G., et al. Natural history of papillary tumor of the pineal region: new insights on biological explanation. *J Neurooncol*. 100. 3 (2010): 487–488.