Pituitary gland of Labeo
(For practical)

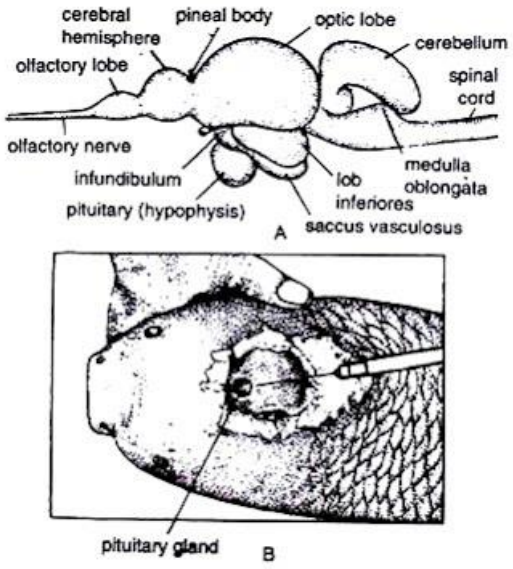
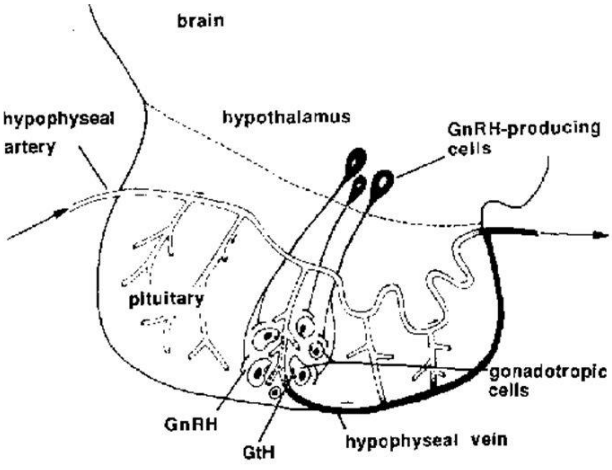


Fig. 29.6 : Labeo sp. (Rohu fish). A. Brain. Lateral view–Schematic; B. Pituitary gland–fully exposed



1. The pituitary gland in Labeo is a small, pear-shaped, whitish, soft body situated in a cavity -- the sella turcica.
2. The gland is of the lepto-dorso basic type.
3. It consists of the neurohypophysis and adenohypophysis.
4. The adenohypophysis comprises three lobes viz., the rostral pars distalis, the proximal pars distalis and the pars intermedia.
5. The neurohypophysis branches into the pars distalis, extends into the pars intermedia and ramifies extensively. It is composed of loosely arranged fibres among which are present nuclei of the neurones and a few droplets of neurosecretory material.
6. The rostral pars distalis is antero-dorsal in position and is the smallest portion of the gland. It consists of two types of acidophils a few cyanophils and chromophobes.
7. The proximal pars distalis occupies the central region and is the largest portion of the gland. It comprises two types of acidophils two types of cyanophils and a few chromophobes.
8. The cyanophils of the proximal pars distalis may also contain acidophilic or cyanophilic globules of varying sizes. These globules may be either situated inside the nucleus or on its periphery.
9. The presence of cyanophilic material in the blood sinuses indicates a possible pathway through which the secretory products are conducted into the general circulation.
10. The pars intermedia is the posterior most region of the gland and is large. It is composed of two types of acidophils and a few chromophobes. During the breeding season some of the cyanophils resent in the pars intermedia behave like the gonadotrophs of the proximal pars distalis.

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