



Fig. 2. A schematic drawing of the pineal gland's anatomical relations in the adult rat.

Our technique provides 3 distinct advantages for this type of surgery. First, an anterior approach is the most direct route to the gland. A posterior approach necessitates passing over the cerebellum and the corpora quadrigemina while a lateral approach involves pushing in a posteromedial pole of a cerebral hemisphere (figure 2). Secondly, owing to the location of the pineal in the center of the venous drainage system of the brain a certain amount of bleeding is inevitable with all of the previously described methods^{10, 11}. By reflecting the SSV posteriorly hemorrhage from the SSV and CS is obviated by effectively removing these venous channels from the surgical site. The pineal is also visible at this point making its extirpation simple and more certain. Bleeding when encountered, is usually from the inferior sagittal sinus and the venae cerebri magna and can easily be contained by applying gently pressure with a cotton pledget or a piece of gauze. Third, and most importantly, with our method almost perfect sham operations may be performed. The post-ganglionic sympathetic fibres reach the pineal bilaterally having ascended up the carotid plexus and on the tentorium cerebelli. One method of pinealectomy de-

scribed involves doubly ligating and resecting 1 of the 2 TS as well as the SSV. This method almost certainly effects a uni-lateral sympathectomy. With our technique the operated controls are placed under identical surgical trauma, but the innervation remains undisturbed. Thus a comparison of pinealectomized animals and operated controls following surgery measures the effect of removing the pineal and not of the surgical procedure.

In summary an investigation of pineal function by pinealectomy requires a procedure that recognizes the anatomical relations of the gland, the importance of its sympathetic input and a method that is quick, allowing the researcher an opportunity to work with a large number of animals. Our new technique was designed to meet these criteria and thus provide researchers in pineal physiology an important tool in studying the activity of this neuroendocrine gland.

10 J. Ariens Kappers, *J. Neuro-Visceral Relations*, suppl. IX, 140 (1969).

11 F. von Bartheld and J. Moll, *Acta anat.* 22, 227 (1954).

CONGRESSUS

USA

First international conference chitin/chitosan

Wakefield (Mass. USA), 11-15 April 1977

Advancements made in the recovery and applications of this resource, a chemical relative to cellulose found in the exoskeletal structure of arthropods (i.e. insects, crabs, shrimp), have led to its availability in industrial quality and supply. Identified markets for applications include pharmaceuticals, food processing, paper formulation, agriculture, waste treatment, adhesives and textiles. The Massachusetts Science and Technology Foundation and the Sea Grant Program of the Massachusetts Institute of Technology are planning to convene the First International Conference on this subject to be conducted in the Greater Boston area, 11-13 April 1977.

Further information by the Massachusetts Science and Technology Foundation, 10 Lakeside Office Park, Wakefield, Mass. 01880, USA.

Belgium

The 25th Annual Colloquium on Protides of the Biological Fluids

in Brugge, 2-6 May 1977

Topics: Lipoproteins; cell lines in the study of lymphocyte antigens and receptors; new methods in cell separation. Further information by: 25th Colloquium Protides of the Biological Fluids, Simon-Stevin-Institut, Jerusalemstraat 34, B-8000 Brugge, Belgique.