

All fluids tested were able to raise the BP after an initial fall, slow and amplify the pulse, cause diuresis, contract the musculature of intestine bladder and uterus and dilate the pupil of the isolated frog eye. However, it was noted that cases with obstructive hydrocephalus were most potent in their effects. This was explained by a continued posterior lobe secretion into ventricles with no possibility of escape into the general circulation. Traumatic and epileptic cases gave the least potent CSF samples.

Cushing went on to suggest that the CSF could be used as a source of posterior lobe hormones to be extracted and remarkably suggested that there may be two hormones a pressor and a depressor substance, the latter causing dilation of the frogs eye.

In the last 20 years the truth of Harvey Cushing's supposition has been borne out. The posterior pituitary does secrete two substances, vasopressin and oxytocin; both are fully characterised and synthesised. Their actions were until very recently believed to be exerted only by secretion into the blood stream.

Nevertheless, in the last decade evidence has confirmed the presence of posterior pituitary hormones in the CSF, and neurosecretory pathways for vasopressin secretion directly into the third ventricle have been identified. Harvey Cushing's choice of patients has also been fully supported in that patients with an increased intra cranial pressure are those in which vasopressin is most elevated (4-8). The role for this CSF pathway is still to be fully understood but there is evidence that it may be of importance in learning mechanisms, brain water permeability and in the regulation of peripheral levels. (9).

I wondered why Cushing's work in this area remained so totally ignored. The answer lies in the fact that it was so ahead of its time that confirmation required the passage of 60 years and the development of radio immunoassays. The scepticism of his contemporaries also did not help; indeed John Fulton in Cushing's biography was to say "In the papers on posterior pituitary secretion,

he had been led astray, but despite an impressive array of evidence to the contrary, he never really admitted that he was wrong; in addition, he unfortunately caused a number of his junior associates to waste valuable time and effort in attempting to establish his original contention". (2) Harvey Cushing was a man with an obsession for priority; I hope that this short review will point people in the direction of his work in this field and also to realise that reviewing papers long in the past can contribute to work in these modern times.

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Correspondence

Screening for Allergy

Dear Sir,

Dr. Burton has asked how to screen a patient for allergy in the absence of a reliable test.

The steps for allergy screening are as follows:

1. Search for a family history of allergy. When there are allergies on both sides of the family an allergic diathesis is very likely.
2. As a new born baby was the patient easy to rear or did it cry excessively, have colic, bring back its feed or show signs of being "difficult"?
3. Did the patient as a child have its tonsils or adenoids removed, were grommets needed? In childhood did the patient have asthma or eczema, recurrent infections, frequent colds, convulsions, tantrums, tummy aches, growing pains, nightmares, bed wetting or any other indication of allergy?
4. Has the patient ever suffered from migraine, catarrh, sinusitis, hay fever, urticaria, mouth ulcers, an irritable bowel or trouble with bright lights?
5. Does the patient now have a low energy level, wake

tired in the morning, feel sleepy in the day, have problems with sleep such as snoring, and are there any addictions?

6. Where there is no clinical evidence of an allergic diathesis find out what happened immediately prior to the onset of the illness. Look for a poisoning, a viral illness or any incident which could have damaged the immune system and so set the scene for an allergic illness.

7. Where there is a strong suspicion that the patient does have an allergic diathesis then the final test is to put the patient on an elimination diet for two weeks.

8. If the patient then experiences initial withdrawal symptoms followed by amelioration of his original symptoms the screening for allergy is positive.

Yours faithfully,

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