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Though this method has been useful in the differentiation of pituitary and ectopic ACTH excess with the more tedious and less accurate ACTH bioassay, we have not performed this procedure lately. Because of the more sophisticated x-ray procedures in diagnosing pituitary tumors, the availability of the more accurate radioimmunoassay for ACTH and the refined work-up of the pituitary-adrenal axis, it has always been possible recently to make the differential diagnosis between pituitary and ectopic ACTH excess without measuring central ACTH levels.

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JUGULAR-VEIN SAMPLING OF ACTH

To the Editor: Corrigan and his co-workers (*N Engl J Med* 296:861, 1977) determined the pituitary source of ACTH hypersecretion in Cushing's syndrome in one patient by measuring ACTH in the pituitary effluent after selective catheterization and sampling of the pituitary venous drainage. They suggested that this procedure might be useful in differentiating pituitary from ectopic ACTH excess. They mentioned two other patients in whom jugular-vein ACTH measurements were used to localize the site of ACTH production in Cushing's syndrome: one with a pituitary tumor¹ and another with apparent ectopic ACTH syndrome.²

We agree that in selected cases, ACTH measurements in the jugular vein can be useful in the differential diagnosis of pituitary or ectopic ACTH production. Some years ago we used the Lipscomb-Nelson bioassay method³ to compare ACTH in the jugular vein and the periphery in cases of ectopic ACTH overproduction and found no gradient.^{4,5} In contrast to these three cases, the ACTH levels in the jugular vein in patients with Addison's disease and in adrenalectomized patients with Cushing's disease were significantly higher than those in a peripheral vein.⁶ The cranial bulb of the jugular vein was punctured directly in our patients since it was performed for the determination of cerebral blood flow at the time.