

DISCUSSION

JACOBS (Paris): Je voudrais demander au Dr. Zech s'il a mesuré l'activité rénine de sujets en hypertension maligne dont le chiffre tensionnel est augmenté en fin d'hémodialyse. Cette élévation peut-elle être mise en relation avec une augmentation de la sécrétion de rénine?

ZECH (Lyons): Chez 17 malades dont le niveau tensionnel était variable, nous n'avons trouvé que de très faibles variations de l'activité rénine avant et après une épuration déterminant une perte de poids moyenne de 2 kg et une diminution de la kaliémie de 5 à 3 mEq.

KEMP (Copenhagen): Has anyone looked at the juxtaglomerular apparatus after nephrectomy? If so, what did you find? Could you find any correlation, or were the kidneys so fibrotic that you could not see anything?

TOUSSAINT (Brussels): The four kidneys which were removed did not show any impaired granularity of the juxtaglomerular apparatus, but all these kidneys were remarkable for the fact that the arterial lesions were very severe, with fibrinoid change and the onion-skin picture.

ZECH (Lyons): Dans les deux cas où une néphrectomie bilatérale a été pratiquée, il s'agissait d'hypertension artérielle primitive maligne. L'architecture glomérulaire était conservée et les lésions artérielles prédominantes à l'examen histologique.

MAXWELL (Los Angeles): If I understood Dr. Toussaint's results correctly, he found an inverse correlation between peripheral renin levels and the creatinine clearance and the serum sodium concentration in patients with chronic renal disease, and a significantly positive correlation between peripheral renin activity and systolic blood pressure, using the method of Brown, Lever and Robertson. Now, this type of work is vitally needed, and the only other comparable study of which I am aware is the study by Reubi in Berne, Switzerland, in which he studied, as I recall, an equally large number of patients, using a method which is somewhat comparable, and could find no correlation at all of any type between peripheral renin, the level of the blood pressure and the serum sodium. Is there any explanation for this, or does he think that the methodology employed is that much superior, as I believe it is?

I address the second question to any of the panellists. Have you done any studies on the response of peripheral renin activity to the usual stimuli such as the upright position, or sodium depletion—a low sodium diet for five days—and is the peripheral renin response comparable to that of normal subjects?

TOUSSAINT (Brussels): I could not answer the first question. The correlation between function and renin is only noticed in grafted patients, not in patients with this type of Bright's disease. They are all under dialysis.

As to variability in the renin level in patients with terminal Bright's disease, the only thing we have noticed was this remarkable rise in four patients with acute haemorrhage, and these are the only determinations made in patients with bleeding.

ZECH (Lyons): Nous n'avons pas étudié les variations de l'activité rénine chez les insuffisants rénaux après d'autres stimuli. Cependant les soustractions liquidiennes rapides représentent l'équivalent d'une saignée, lorsqu'elles sont effectuées en une ou deux heures et l'activité rénine ne semble pas modifiée dans ces cas.

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UNIDENTIFIED MEMBER: Can you make any statement from renin determinations on who should be nephrectomised—who will benefit and who will not?

TOUSSAINT (Brussels): Among dialysed patients you have a few with very high renin levels and with malignant hypertension, and I think that these patients should be rapidly nephrectomised. Then you have patients with low renin, who are very sensitive to changes in sodium. Between these two extremes there are probably many variations, and there we do not think that a bilateral nephrectomy should be advised.

ABER (Birmingham): I wonder if any of the speakers has had any experience in the use of high doses of aldosterone-antagonists—say 300 mg per day—in the treatment of hypertension in this particular group of patients?

(No replies).