

**TRANSEPTAL ROUTE OF RADIOFREQUENCY ABLATION FOR LEFT-SIDED ACCESSORY PATHWAYS USING LONG VASCULAR SHEATHS - EFFICACY, COMPLICATIONS AND RECURRENCES.**

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A total of 51 left-sided accessory pathways in 49 patients ( M 30 : F 19 , age  $33.2 \pm 13.5$  years) underwent radiofrequency ( RF ) ablation via the transeptal route utilizing specialized intravascular sheaths with compound curves for recurrent attacks of supraventricular tachycardia. Pre-excitation occurred in 12 ( 24 % ) patients and the rest were concealed. Multiple pathways occurred in 2 ( 5 % ) patients. The location of the pathways were : anterolateral 3 ( 6 % ) , lateral 36 ( 71 % ), posterior 5 ( 10 % ) & posteroseptal 6 ( 12 % ). A broad band of accessory connection occurred in 1 patient ( 2 % ). Success rate of 92 % (45/49) was achieved with mean procedure time was  $1.7 \pm 0.5$  hour and the mean fluroscopic time  $22.5 \pm 15.2$  minutes. Mean no. of RF pulse was  $4.1 \pm 3.6$  ( range 1 - 20 ). Cardiac tamponade occurred in 2 patients ( 5 % ) and 2 patients requiring a switching over to the transaortic route for successful ablation. All patients were followed up for  $13.8 \pm 6.9$  months and symptomatic recurrence of tachycardia or pre-excitation on ECG occurred in 2 patients ( 5 % ). In conclusion transeptal route of RF ablation utilizing specialized sheaths is associated with a high success rate, a short procedure time and a low recurrence rate in the medium term when compared with the retrograde transaortic approach. The specialized sheaths may help in stabilizing the ablation catheter during the procedure which can generate more adequate lesions and consequently a low recurrence rate.

**HUMAN ADRENOMEDULLIN IN CARDIOVASCULAR, RESPIRATORY, HEPATIC AND RENAL DISEASE.** Bernard MY CHEUNG, Raymond LEUNG. University Department of Medicine, The University of Hong Kong, Hong Kong

Adrenomedullin (AM) is a potent vasodilating peptide first isolated from pheochromocytoma and adrenal medulla but is also found in the heart, lungs and kidneys. Intravenous infusion of AM in animals causes natriuresis and diuresis. It may also be a paracrine factor because endothelium and vascular smooth muscle cells synthesise as well as express its receptor. AM induces vasorelaxation by activating adenylyl cyclase and by stimulating the release of nitric oxide. Its role in man is as yet unclear. We developed a specific radioimmunoassay (lower limit of detection 1pg/tube, coefficient of variation 7%) and measured the immunoreactivity of human AM in the plasma of 58 male subjects:

	n	mean $\pm$ standard error
normal	12	$7.8 \pm 1.4$ pmol/l
essential hypertension	8	$16.3 \pm 1.9$ pmol/l
congestive heart failure	12	$17.5 \pm 2.8$ pmol/l
chronic obstructive pulmonary disease with hypoxia	4	$20.0 \pm 1.5$ pmol/l
liver cirrhosis with ascites	10	$15.5 \pm 1.9$ pmol/l
chronic renal failure	12	$17.7 \pm 2.5$ pmol/l

Plasma AM level in patients with hypertension, heart failure and renal failure were raised compared to controls ( $p < 0.01$ , Mann-Whitney U test), confirming previous reports. In addition, plasma AM levels were significantly raised in patients with ascites due to liver cirrhosis and in hypoxic chronic obstructive pulmonary disease patients. These results suggest that plasma AM levels may be raised in a variety of diseases.