were found improved (7/17 pts, 41%), unchanged (3/17 pts, 18%) and deteriorated (7/17 pts, 41%).

These data indicate that PTA is an efficacious therapeutic approach in FD-RAS hypertensive patients while in ATS-RAS hypertensive patients PTAS is often needed with only a partial benefit on BP and renal function outcomes.

Key Words: Renovascular Hypertension, Percutaneous Renal Artery Angioplasty, Stenting

OR-45
RENAL ARTERY STENOSIS AND HYPERTENSION IN PREGNANCY
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Renovascular hypertension is an uncommon cause of hypertension in pregnancy. A small number of case reports suggest it can lead to significant maternal and fetal complications. We report six pregnancies in four patients who had hypertension secondary to renal artery fibromuscular dysplasia (FMD). Two patients had a history of hypertension prior to their pregnancy. One patient required hospitalization for blood pressure control during the second trimester resulting in improved blood pressure and subsequent vaginal delivery at term. A second decided on termination of pregnancy at ten weeks of gestation. Both patients had persistent hypertension after pregnancy and renal artery FMD was diagnosed. Both were treated medically with the second patient subsequently having an uncomplicated pregnancy.

Two patients first developed hypertension during pregnancy and one of them presented with hypertensive crisis at eight weeks gestation. She underwent successful bilateral renal artery angioplasty resulting in resolution of her hypertension after termination of her pregnancy. The other patient presented at 20 weeks of gestation with preeclampsia, placental abruption and intrauterine fetal death. Subsequently, she was found to have an atrophic kidney secondary to an occluded artery on one side and a contra-lateral high-grade stenosis. Her hypertension resolved after angioplasty and nephrectomy. She delivered a healthy baby the following year after an uncomplicated pregnancy.

This group of patients illustrates the severity of both maternal and fetal complications that can arise in the setting of FMD related hypertension in pregnancy. Issues that complicate the management of patients with renovascular hypertension in pregnancy include the contraindication of angiotensin converting enzyme inhibitors, angiotensin receptor blockers, and the potential teratogenic effects of radiation exposure during diagnostic studies. Given the severity of the complications of FMD in pregnancy it seems justified to exclude renovascular disease in young hypertensive women before conception. In addition, this condition should be considered in those patients who present with severe hypertension early in pregnancy. Based on the few published reports, successful revascularization during mid pregnancy may improve both maternal and fetal outcomes.

Key Words: Hypertension in Pregnancy, Preeclampsia, Fibromuscular Dysplasia

OR-46
HIGH PREVALENCE OF PRIMARY ALDOSTERONISM AMONG BLACK AND WHITE SUBJECTS WITH RESISTANT HYPERTENSION

Objective: Recent reports suggest that primary aldosteronism (PA) may occur in up to 15% of hypertensive patients. To determine the prevalence of PA among patients with treatment-resistant hypertension, we evaluated 54 consecutive patients referred to UAB for resistant hypertension (requiring use of 3 or more antihypertensive agents).

Methods: Subjects were maintained on prescribed antihypertensive therapies except for spironolactone, amiloride, or triamterene. Plasma aldosterone concentration (PAC; ng/dl), plasma renin activity (PRA; ng/ml/hr), and twenty-four hour urinary aldosterone excretion (mcg/24-hr) during high dietary salt ingestion (>200 meq/24-hr) were determined in each patient. The diagnosis of PA was confirmed in patients in whom the PAC was <1.0 and 24-hr urinary aldosterone excretion was >12. If unable to adequately complete a 24-hr urine collection, PA was confirmed by fludrocortisone suppression test (FST). High resolution CT of the adrenal glands was performed on every patient with biochemically confirmed PA.

Results: PA was confirmed in 13 of 54 or 24.1% of the patients. PA was diagnosed in 7 of 31 or 22.6% of the white subjects and 6 of 23 or 26.1% of African-American subjects. Three of the 13 patients with PA had adrenal adenomas by CT scanning. Compared to confirmatory testing by high dietary salt suppression of urinary aldosterone excretion or FST, the PAC/PRA ratio had a sensitivity of 92.3% and a specificity of 50.0%.

Conclusion: Primary aldosteronism is a common cause of resistant hypertension among African-American and white subjects referred to a specialty clinic. We propose that the PAC/PRA ratio has sufficient sensitivity to screen for but lacks the specificity to confirm the diagnosis of PA. Therefore, PA should be evaluated for by assessment of twenty-four hour urinary aldosterone excretion or FST in all patients with resistant hypertension and a suppressed PRA (<1.0).

Key Words: Hyperaldosteronism, Resistant Hypertension, Race