# PRES – A Case Report

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INTRODUCTION:

- PRES (Post Reversible Encephalopathy Syndrome)
  is a clinical-radiological syndrome characterised by headache, seizure, altered mental status and visual loss and characterised by white matter vasogenic oedema affecting the posterior occipital and parietal lobes of the brain predominantly.
- Risk factor: Hypertension, immune suppressive therapy, renal diseases, auto immune diseases and Sepsis.

AIM & OBJECTIVES:

- To suspect PRES in a case of seizure with renal artery stenosis due to secondary hypertension.

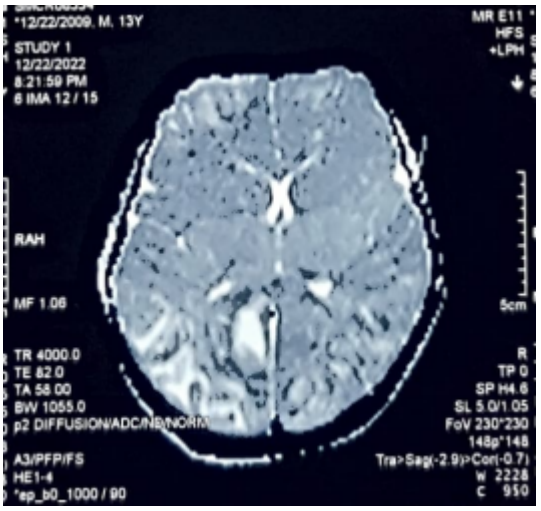
MATERIALS & METHODS:

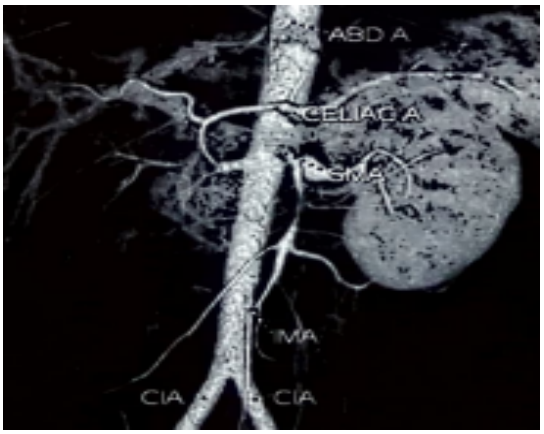
- Guidelines developed from the large data sets from the internet.

CLINICAL SCENARIO:

13 years old boy presented with complaints of seizure

- 2 to 3 episodes. He had history of headache, fever with abdominal pain for last 3 days.
- No h/o seizure in the past. Not a k/c/o SHTN/DM.
- He was received in IMCU with the following vitals BP 160/100, HR 130/min, RR 16/min, SpO2 97 % .
- Investigations: CBC- Tc- 30600, DC 87/14/4 , Hb 11.6, PCV 36.2, Plt 4.03
- CRP 384 , CPK 46 U/l, LDH 1350 IU/L, ESR 13 mm.

- Triglyceride 262 , Total cholesterol 180, LFT/RFT – normal, TSH 3.75, infective panel - negative
- PCR Pro 186, Crt 36, 24 hours urine protein MPR -3.9 g/day, Sputum -pseudomonas +ve,
- ECHO : LVEF Global hypokinesia, EF 32% , Conc LVH, Mild eccentric MR, no TR. ECG – HR 90/min, NSR, no ST changes , LVH+, Nrl axis .
- CT Brain - normal, USG abd – normal, Fundus – normal.
- He was diagnosed as Acute encephalopathy due to Meningoencephalitis/ PRES/Acc.HTN/New onset seizure.
- MRI Brain was taken sugg **hemorrhagic PRES due to SHTN in parietal and occipital region** . For that he was sugg for renal artery doppler.
- Renal artery doppler : Rt renal art couldn't be seen due to abrupt cutoff Rt renal artery, Rt kidney shrunken, Lt kidney -normal .
- CT renal angiogram – circumferancial mural wall thickening involving the sup mesenteric art , **right renal art causing luminal narrowing**, saccular dilatation of Lt renal artery.
- Treatment : He was managed with anti edema/anti HTN/ steroids/ iv antibiotics and anti epileptics, recovered well and was evaluated for vasculitis work up which was turned out to be negative.
- 

MRI Brain showing bilateral occipital , parietal, frontal cortex and subcortical whitematter hyperintensities.
- 

Rt renal artery causing luminal narrowing and saccular dilatation of Lt renal art.

RESULTS AND CONCLUSION :

- Disordered cerebral auto regulation
- Cerebral vasoconstriction causing subsequent infarct in the brain
- Endothelial dysfunction resulting in brain hyper perfusion
- A high index of suspicion and prompt treatment can reduce morbidity, mortality for early recovery.

KEYWORDS : PRES, Hypertension ,Seizure, Renal Artery, MRI Brain, Posterior Occipital