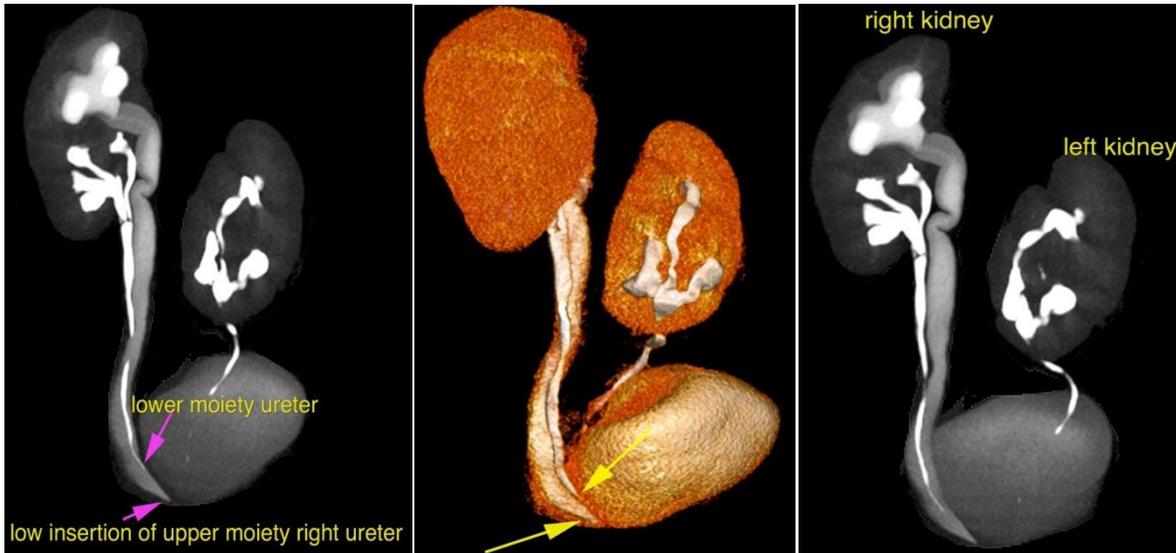


## **BILATERAL DUPLEX RENAL COLLECTING SYSTEMS: A CASE REPORT** **DEMONSTRATING THE “WEIGERT-MEYER LAW”**

**CLINICAL DETAILS:** A 35 year old female referred with history of right lumbar region pain, showing right hydronephrosis on ultrasound examination. Multiphasic CT Urogram performed to rule out distal obstruction demonstrated the following findings:



- **Complete right duplex collecting system with double renal moiety and double ureter. Moderate hydrouretero-nephrosis in upper moiety with ectopic inferomedial insertion of ureter at the neck of urinary bladder. Obstructed upper moiety showing edematous insertion due to inflammation. Delayed excretion of contrast in the obstructed right upper moiety.**
- **Bifid pelvis of right lower moiety with fusion at PUJ showing orthotopic insertion of lower moiety ureter at VUJ.**
- **Malrotated low placed left kidney with duplex collecting system draining into single ureter uniting at the PUJ with orthotopic ureteric insertion. No hydrouretero-nephrosis.**

**DISCUSSION:** The incidence of duplex kidney is approximately 1 %, of which approximately 20% are bilateral in nature. This congenital renal tract abnormality is characterized by an incomplete fusion of upper and lower pole moieties resulting in a variety of complete or incomplete duplications of the collecting system.

**“WEIGERT-MEYER LAW”:** In duplex kidney and complete ureteral duplication, the **upper** renal moiety has **ectopic insertion medial and inferior** to the lower pole moiety ureter and can be associated with a ureterocoele. The **lower** renal moiety has **orthotopic insertion** lateral and superior to the ureter draining the upper pole and is more prone to vesicoureteric reflux.

Regards, Dr. Deepa S. Nadkarni/ Dr. Poonam P. Hegde/ Dr. Shaikh M. Mazhar