**[ONLY LYMPHADENOAPTHY]: (MSN)**

**Few enlarged non-necrotic mesenteric lymph nodes are seen in peri-umbilical region having average short axis diameter of 5 to 6 mm.** No abnormal bowel wall thickening/dilatation is seen.

**Impression:**

**Non-necrotic mesenteric lymphadenopathy, likely due to infective/inflammatory etiology.**

**[LYMPHADENOAPTHY WITH NORMAL APPENDIX] –**

**Few enlarged non-necrotic mesenteric lymph nodes are seen in bilateral iliac regions having average short axis diameter of 6 to 7 mm.** No abnormal bowel wall thickening/dilatation is seen. **Appendix appears normal in present study and measures 2.1 mm in AP dimension.**

**IMPRESSION :** **Ultrasound study reveals:**

* **Non-necrotic mesenteric lymphadenopathy, likely due to infective/inflammatory etiology**

**[PELVIS]:**

**There is minimal dilatation of bilateral pelvi-calyceal system with AP dimension of left renal pelvis measuring 4.2 mm, while right renal pelvis measures 5 mm.**

* **Bilateral minimal pyelectasis**

**There is mild dilatation of left pelvi-calyceal system with AP dimension of renal pelvis measuring 9 mm.** Right pelvi-calyceal system appears normal.

**[DIFFUSE ADENOMYOSIS]: Multiple tiny hyperechoic foci are seen diffusely scattered in myometrium, obscuring endo-myometrial echo-complex. This is s/o diffuse adenomyosis.**

**[EARLY ADENOMYOSIS]. Few tiny hyperechoic foci are seen scattered in myometrium s/o Early adenomyosis.**

**[RIGHT SIMPLE OVARIAN CYST] – A well-defined anechoic cystic lesion is seen in right ovary measuring 3.6 x 3.4 cm. It shows no internal septation/vascularity/mural nodule. No sign of torsion is seen in present study. This is s/o RIGHT SIMPLE OVARIAN CYST**

**[RIGHT COMPLEX OVARIAN CYST]- A hypoechoic cystic lesion is seen in right adnexa measuring 3.6 x 3.4 cm. It shows few internal septae within. However, no septal vascularity/mural nodule is seen. Right ovary is not seen separate from this lesion. This is most likely to be COMPLEX RIGHT ADNEXAL LESION, most probably right ovarian in origin.**

**[RIGHT HEMORRHAGIC/ENDOMETRIOTIC OVARIAN CYST] – A hypoechoic reticulated lesion measuring 3.6 x 3.4 cm is seen in right ovary. Lesion shows striations with few low level internal echoes within. No internal vascularity/mural nodule is seen. This is most likely to be RIGHT HEMORRHAGIC/ENDOMETRIOTIC OVARIAN CYST**

**[OVARIAN DERMOID] – An ill-defined intensely echogenic lesion measuring 2.3 x 2.1 cm s seen in right ovary. The lesion shows posterior acoustic shadowing with no internal vascularity. This is most likely to be RIGHT OVARIAN DERMOID.**

**A blind-ending, tubular, non-compressible, aperistaltic, avascular structure measuring 7.5 mm in AP dimension is seen in right iliac region. Mild probe tenderness is seen with peri-appendiceal inflammation. No peri-appendiceal collection is seen. Few enlarged mesenteric lymph nodes are seen in right iliac region. This is s/o ACUTE APPENDICITIS.**

**Appendix is acutely inflamed and measures 7.2 mm in AP dimension. Probe tenderness is seen over it with significant peri-appendiceal mesenteric inflammation. No peri-appendiceal collection is seen. Few enlarged mesenteric lymph nodes are also seen in right iliac region. This is s/o ACUTE APPENDICITIS.**

**Appendix appears edematous and measures 4.5 mm in AP dimension with mild probe tenderness seen over it. Few enlarged mesenteric lymph nodes are seen in right iliac region No peri-appendiceal collection is seen….SUBACUTE APPENDICITIS.**

**Appendix measures 2.8 mm in AP dimension. Probe tenderness is seen over it on deep probing. No peri-appendiceal collection/inflammation is seen. Few enlarged mesenteric lymph nodes are also seen ….CHRONIC APPENDICITIS.**

**Appendix appears minimally edematous and measures 2.9 mm in AP dimension. Probe tenderness is seen over this region on deep probing. No peri-appendiceal collection/inflammation is seen….CHRONIC APPENDICITIS.**

**[NORMAL APPENDIX] - Appendix is visualized and appears normal in present study. It measures 2.3 mm in AP dimension. No probe tenderness is seen over right iliac region.**

**(PCOD)**

**Right ovary measures 2.7 x 2.3 x 2 cm (VOL – 7.3 cc).**

**Left ovary measures 2.9 x 1.7 x 3.2 cm (VOL – 7.9 cc).**

**Both ovaries appear bulky and show multiple subcentimetric follicles arranged peripherally with central echogenic stroma. This is s/o bilateral polycystic ovaries.** No solid/cystic adnexal or ovarian lesion noted

**Suggest follow up and correlate clinically.**

**DR. SEEMAB BANADAR**

**MD (RADIOLOGY)**

**(CONSULTANT RADIOLOGIST)**

**A SINGLE LOOSE LOOP OF CORD IS SEEN AROUND NECK IN PRESENT STUDY.**

**[HERNIA]**

**[UMBILICAL] - A defect 7 mm is noted at umbilicus with herniation of omental fat through it. This herniation is partially reducible. No bowel herniation /obstruction/ strangulation is seen.**

**[EPIGASTRIC] - A defect 7 mm is noted at epigastric region with herniation of omental fat through it. This herniation is partially reducible. No bowel herniation /obstruction/ strangulation is seen.**

**INGUINAL HERNIA -**

**A defect of 6.8 mm is seen at left superficial inguinal ring with herniation of bowel loop through it, not extending into left scrotal sac. Herniation is completely reducible. No obstruction/strangulation is seen.**

**Multiple large calculi are seen in mid and lower calyces, largest calculus in mid-calyx measures 17 mm, while in lower calyx, it measures 13 mm. Another lower ureteric calculus is seen measuring 5.6 mm, approx. 2.4 cm proximal to vesico-ureteric junction causing proximal hydroureter and mild hydronephrosis. Multiple low level internal echoes are seen in dilated left pelvi-calyceal system and ureter…this is s/o underlying infection.**

**[FATTY LIVER] –**

**GRADE I - The echogenecity of liver is mildly increased s/o fatty infiltration.**

**GRADE II – The echogenecity of liver is moderately increased obscuring portal echogenecity s/o Grade II fatty liver.**

**GRADE III - The echogenecity of liver is significantly increased obscuring right diaphragmatic outline s/o Grade III fatty liver.**

* **Non-obstructing tiny left renal calculi.**

**(HEPATIC CYST)**

**A cystic lesion is seen in right lobe measuring 29 x 21 mm. It shows no vascularity/internal septation/calcification…Simple hepatic cyst**

**[ENTERITIS]**

**Small bowel loops in peri-umbilical region have edematous wall with peri-enteric mesenteric inflammation. Bowel loops show normal peristalsis. Few enlarged mesenteric lymph nodes are also seen in periumbilical region having avg. short axis diameter of 7-8 mm.. No abnormal wall thickening/obstruction/mass lesion is seen in the visualized bowel loops.**

* **Enteritis, likely due to infective/inflammatory etiology**

**Small bowel loops in peri-umbilical region have edematous wall with peri-enteric mesenteric inflammation. Bowel loops are showing increase in peristalsis. Few enlarged mesenteric lymph nodes are also seen in periumbilical region having avg. short axis diameter of 7-8 mm. No abnormal wall thickening/obstruction/mass lesion is seen in the visualized bowel loops.**

* **Enteritis, likely due to infective/inflammatory etiology**

**OR**

**Proximal duodenum show edematous wall. Rest of the visualized small bowel loops appear unremarkable. Few enlarged mesenteric lymph nodes are also seen. No abnormal wall thickening/obstruction/mass lesion is seen in the visualized bowel loops.**

* **Proximal duodenitis, likely due to infective/inflammatory etiology**

**Suggest Upper GI-ENDOSCOPY to rule out hiatus hernia/acid-peptic disease/gastritis. Correlate clinically.**

**Follow up and correlate clinically. (Suggest follow up, if symptoms persist)**

**[COLITIS]**

**Descending colon shows edematous wall with minimal peri-colonic inflammation. No abnormal dilatation/obstruction/mass lesion is seen in visualized bowel loop.** No significant abdominal lymphadenopathy.

* **Colitis involving descending colon, likely due to infective/inflammatory etiology.**

**[ENTERO-COLITIS]**

**Small and large bowel loops show edematous wall with surrounding mesenteric inflammation. Small bowel loops show increase in peristalsis. No abnormal dilated bowel loop/obstruction is seen. Few enlarged mesenteric lymph nodes are also seen.**

* **Entero-colitis, likely due to infective/inflammatory etiology.**

**DJ stent in situ is seen extending from right kidney into urinary bladder.**

**[LOWER URTERIC CALCULUS] (LOW) A calculus measuring 8.5 mm is seen in lower ureter, approx. 1.2 cm proximal to vesico-ureteric junction causing proximal hydroureter and mild hydronephrosis.**

**[UPPER URETERIC CALCULUS] (UPP) A calculus measuring 10 mm is seen in upper ureter, approx. 3.5 cm distal to pelvi-ureteric junction causing proximal hydroureter and mild hydronephrosis.**

**[MID-URETERIC CALCULUS] - A calculus measuring 4.1 mm is seen in mid-ureter causing proximal hydroureter and mild hydronephrosis.**

**[PUJ CALCULUS] - A calculus measuring 10 mm is seen at pelvi-ureteric junction (PUJ) causing mild hydronephrosis.**

**[VUJ CALCULUS] A calculus measuring 8.5 mm is seen at vesico-ureteric junction (VUJ) causing proximal hydroureter and mild hydronephrosis.**

**[RECENT PASSAGE OF CALCULUS] –**

**Mild hydronephrosis with entire hydroureter is seen. However, no obvious intra-renal/ureteric calculus is appreciated.**

**IMPRESSION –**

* **Minimal right hydro-uretero-nephrosis with no obvious intra-renal/ureteric calculus. Thus, this fullness could be residual due to recent passage of calculus.**

**(ADPKD)**

**Right kidney measures 20.1 x 11.1 cm. Left kidney measures 23.9 x 10.6 cm.**

**Both kidneys appear bulky and show multiple anechoic cystic lesions of varying sizes. Average size of cysts measures 15 to 18 mm on left and 10 to 15 mm on right. These cysts are obscuring cortico-medullary differentiation.**

**Conclusion:** **Ultrasound study reveals:**

* **Multiple anechoic cystic lesions in both kidneys– Polycystic kidney disease**

**ADVICE: RFT and clinical correlation.**

**(EARLY RENAL PARENCHYMAL DISEASE)**

**BOTH KIDNEYS**

**Right kidney measure 8.6 x 3.9 cm. Left kidney measure 9.9 x 5 cm.** Both kidneys appear normal in size and shape. **They show mild increase in renal cortical echogenicitiy. However, cortico-medullary differentiation is maintained.** No calculus /hydronephrosis is seen on either side.

**(EARLY PYELONEPHRTIS)**

**BOTH KIDNEYS**

**Right kidney measure 9.8 x 5.1 cm. Left kidney measure 8.6 x 5.1 cm**.

Both kidneys appear normal in size and shape. **They show heterogeneously increase in cortical echogenicitiy, however, cortico-medullary differentiation is maintained bilaterally.** **This is s/o early pyelonephritis**. No calculus /hydronephrosis is seen on either side.

**[PROSTATOMEGALY] - Prostate measures 3 x 4 x 5 cm (VOL -52.4 cc). It appears enlarged in size with median lobe indenting into the base of bladder.**

**[FIBROID] - An intra-mural fibroid of size 15.8 x 13.2 mm is noted in fundo-posterior uterine wall**.

**[COMPLEX RENAL CYST] -A cystic lesion with internal septation is seen at mid pole measuring 1.7 x 1.1 cm. It shows no septal vascularity/calcification/solid component s/o complex cyst.**

**{HEMANGIOMA} - A well-defined hyperechoic lesion with no internal vascularity/calcification and measuring 1.3 x 1.1 cm is seen in right lobe, most likely to be hemangioma.**

**(GROSS ASCITES): Significant free fluid is noted in Morrison’s pouch, perihepatic and perisplenic regions, bilateral paracolic gutters, inter-bowel region and in the pelvis s/o Gross ascites**

**CBD appears normal and measures 2.1 mm at porta. Portal vein appears normal and measures 12.2 mm at porta**. **It shows normal hepatopetal flow. No thrombus is seen**

**{VARICOCELE)**

**Screening of bilateral inguino-scrotal regions shows mild varicocele on left with average venous diameter in pampiniform plexus measuring 3 to 4 mm. No reflux on Valsalva manouvre is seen.** No varicocele on right. Both testes are normal in size, shape, echotexture and vascularity

**[PCOD]**

**Right ovary measures 4.1 x 3.1 x 2 cm (VOL -13 cc),**

**Left ovary measures 4.6 x 3.6 x 2.1 cm (VOL -18.2 cc).**

**Both ovaries appear bulky with peripherally arranged sub-centimetric follicles having central echogenic stroma. This is s/o bilateral polycystic ovaries.** No solid/cystic adnexal or ovarian lesion noted

**Mild fullness is seen in left pelvi-calyceal system with proximal hydroureter. Mid and distal ureter are obscured due to overlying bowel gases. No intra-renal calculus is seen.**

**IMPRESSION :** **Ultrasound study reveals:**

* **Mild fullness in left pelvi-calyceal system with proximal hydroureter….. ? due to obstructive pathology like calculus/stricture in mid/distal ureter. Mid and distal ureter are obscured due to overlying bowel gases.**

**Suggest follow up with better bowel preparation.**

**Correlate clinically. (Suggest follow up, if symptoms persist)**

**[EARLY LIVER CIRRHOSIS] - It appears heterogeneously coarse in echotexture with irregular margins and surface nodularity.**

**[ADVANCED CIRRHOSIS] – Liver appears shrunken and measures 8 cm. It is heterogeneously coarse in echotexture with irregular margins and surface nodularity**

**[UTERINE PROLAPSE]: There is e/o uterine prolapse in the form of the cervical descent below pubic symphysis after Valsalva manouvre.**

**[CKD]**

**BOTH KIDNEYS**

**Right kidney measure 7.1 x 4.6 cm. Left kidney measure 6.7 x 3.3 cm**.

**Both kidneys appear small and shrunken. They show raised cortical echogenicitiy with poor cortico-medullary differentiation**. No calculus /hydronephrosis is seen on either side. **A large exophytic simple cortical cyst is seen at mid pole of right kidney measuring 3.6 x 3.3 cm. Few sub-centimetric simple cortical cysts are also in left kidney**.

**[RENAL CONCRETIONS]**

**Few tiny renal concretions are seen. No hydronephrosis is seen. Ureter is not dilated.**

**Conclusion:** **Ultrasound study reveals:**

* **Few tiny right renal concretions.**

**There is excessive gaseous distension of bowel loops noted.** No abnormal wall thickening/dilatation is seen in visualized bowel loops. No obstruction or obvious mass lesion is seen.

**MILD BRONCHITIS - There is mild prominence of broncho-vascular markings bilaterally s/o bronchitis.**

**BRONCHOPNEUMONIA.**

* **Ill-defined patchy opacities are seen in upper and mid zones of both lungs s/o bronchopneumonia.**

**PELVIC CONGESTION Few dilated, tortuous para-uterine veins are seen with diameter > 4 mm. These features are s/o Pelvic congestion.**

**[CHRONIC CERVICITIS] - Cervix appears minimally bulky and measures 3.9 x 3.2 cm. However, no focal lesion or abnormal vascularity is seen. This is s/o chronic cervicitis.**

**[PELVIC INFLAMMATORY DISEASE (PID)]. Minimal free fluid is seen in pouch of Douglas (POD) and surrounding both ovaries. However, both ovaries appear normal in size. No solid/cystic adnexal or ovarian lesion noted either side. These features are s/o PELVIC INFLAMMATORY DISEASE (PID).**

**[DIFFUSE FIBROADENOSIS] - There is e/o prominent fibro-glandular tissue in the peri-areolar region s/o diffuse fibroadenosis.**

**BOTH KIDNEYS -**

**RIGHT KIDNEY**:-**Measures 10.3 x 3.6 cm. LEFT KIDNEY**:- **Measures 10.6 x 5.9 cm.**

**Both kidneys appear edematous.** They appear normal in size, shape and echotexture. No calculus/hydronephrosis is seen on either side. Ureters are not dilated.

**WORM INFESTATION**

**Few echogenic tubular worm-like structures are noted in distal ileal loops. No abnormal bowel dilatation/obstruction is seen. Few enlarged mesenteric lymph nodes are also seen.**

* **Worm infestation of small bowel loops as described.**

**CERVICAL INCOMPETENCE**

* **U-shaped cervical funneling is seen with funnel length measuring 2.9 cm and width measuring 0.7 cm. Cervical length is 2.9 cm. This is s/o cervical incompetence.**

**U-shaped cervical funneling is seen s/o cervical incompetence**

**CELIAC DISEASE/TROPICAL SPRUE**

**Small bowel loops in peri-umbilical region show blunted villi. They are fluid filled and show mild increase in peristalsis. No abnormal dilated bowel loop/obstruction/mass lesion is seen. No significant abdominal lymphadenopathy**

* **Blunted villi in peri-umbilical small bowel loops with mild increase in peristalsis – Celiac disease/tropical sprue needs to be ruled out.**

**HIATUS HERNIA**

**There is suspicious e/o displacement of gastric fundus above the level of diaphragm …..? hiatus hernia**

**Suspicious e/o displacement of gastric fundus above the level of diaphragm …..? hiatus hernia. Suggest Upper GI-ENDOSCOPY for further evaluation.**

**BILATERAL SEMINAL VESICULITIS.**

**Bilateral seminal vesicles appear mildly bulky with right measuring 4.8 x 1.1 cm and left measuring 3.5 x 1.5 cm. No focal lesion/abnormal vascularity is seen. This is s/o bilateral seminal vesiculitis.**

**LOW LYING PLACENTA**

**Placenta is low-lying with its lower edge approx. 1.9 cm away from internal Os….LOW LYING PLACENTA**

**CHRONIC CERVICITIS**

**Cervix appears bulky and measures 4.4 x 3 cm. No focal lesion/abnormal vascularity is seen…..Chronic cervicitis.**

**CONFLUENT LYMPHADENOPATHY (TB)**

**Multiple enlarged non-necrotic confluent mesenteric lymph nodes are seen in peri-umbilical and right iliac region having average short axis diameter of 7 to 8 mm.** No abnormal bowel wall thickening/dilatation is seen.

* **Non-necrotic confluent mesenteric lymphadenopathy, likely due to infective/inflammatory etiology.**

***Suggest follow up after a course of broad spectrum antibiotic. If still symptoms persist, abdominal Koch’s infection needs consideration.***