Summary and Conclusion

TRUS has become crucial in the assessment of infertility of couples, in 50% of whom the male partner is responsible. The exact etiology of male infertility had been a challenging diagnostic problem during the last few years. The recent advances in diagnostic imaging including TRUS has enabled accurate diagnosis of many of the underlying abnormalities.

The gross and radiological anatomy of the male lower urogenital tract has been reviewed with special reference. The technical aspect of TRUS as well as its diagnostic merits and capabilities were detected. It was found that inspite of the difficulties attributed to the complexity of the embryology, anatomy and pathologic alterations of the urogenital tract, TRUS proved to be a reliable and accurate modality in evaluating most of the gross seminal vesicles, and or vas deferens, and presence of cysts and calcifications.

TRUS is an inexpensive, non-invasive and reliable means of evaluating the integrity of the distal seminal tract. TRUS also provides a unique insight into the function and pathology of ejaculation. The principal application of transrectal ultrasonography in the infertile men is to evaluate patency of distal excurrent ductal system of the male genitalia. Although gold standard for evaluation of male ductal system is vasography. TRUS has the advantage of being non-invasive. Transrectal ultrasound also allows visualization of seminal vesicles, prostate and ejaculatory ducts. So presently TRUS has replaced vasography as the
primary modality for imaging the distal ductal system. As TRUS is an effective and office based modality for evaluating the prostate, seminal vesicles, distal portion of both vases and ejaculatory duct systems for evidence of obstruction, either partial or complete.

The first objective when treating an obstructive azoospermic patient is to determine rapidly and with minimal cost and risk whether the cause is treatable or not. TRUS provides the anatomical detail to make the clinical diagnosis of male infertility. The precise anatomy and level of the abnormality dictate whether the abnormality can be surgically corrected or not. If correctable, U/S examination will help guide appropriate surgical management. In addition, TRUS offers new clinical insights into the causes of distressing genitourinary symptoms often ascribed to prostatitis and or seminal vesiculitis.