

SUMMARY AND CONCLUSION

Transrectal ultrasonography being in direct contact with prostate, giving valuable data but it was the transrectal prostatic needle biopsy that put the final diagnosis. Trans-abdominal ultrasonography has a definite role in size estimation in case of benign prostatic hyperplasia preoperatively. So, it may provide the needed information in choosing the appropriate surgical route. In cases of chronic prostatitis and prostatic carcinoma, transabdominal ultrasound has of a moderate diagnostic value, for the weak informative data of the prostatic inside echopattern and echotexture. Transrectal ultrasound determines prostatic mass, diagnose prostatic cancer and evaluates exact staging of prostatic cancer and pathology of the seminal vesicles.

Clinical staging is most accurate when the results of ultrasound are combined with digital rectal examination, biochemical markers and other studies. The use of transrectal ultrasound in combination with the biopsy system had made diagnosis and staging easily attained using one comprehensive procedure. In an outpatient setting biopsy may be performed immediately after finding a suspect lesion.

TRUS is twice as sensitive than digital rectal examination. To diagnose prostatitis the following ultrasound features were identified, high density and mid range echoes, echolucent zones, capsular irregularity. The high density echoes represent corpora amylacea; the mid range echoes inflammation; fibrosis and the echoluscent zone inflammation.

CT scanning has no appreciable role in differentiation of different types of prostatic diseases. It was of no benefit in early prostatic carcinoma but can be used in late cases to assess extraprostatic extension and detection of lymph node status. CT understaging of cancers may occur if microscopic invasion of tumour to surrounding structures was present or due to inability of CT to identify metastatic deposits in a normal sized lymph node. Also CT overstaging of tumours can occur when there is insufficient body fat, makes delineation of tissue planes impossible.

MR imaging has proved quite unreliable for detection and diagnosis of prostatic cancer. On the other hand, it appears promising in the staging of prostatic carcinoma because of excellent contrast resolution and multiplanar capabilities that enable separation of the prostate from adjacent structures.

Isotope scanning is the most reliable method in detecting distant bone metastases in prostatic carcinoma.