Role of ultrasonography and computerized tomography in assessment of prostatic diseases

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Transrectal ultrasonography being in direct contactwith prostate, giving valuable data but it was thetransrectal prostatic needle biopsy that put the finaldiagnosis. Trans-abdominal ultrasonography has a definiterole in size estimation in case of benign prostatichyperplasia preoperatively. So, it may provide the neededinformation in choosing the appropriate surgical route. Incases of chronic prostatitis and prostatic carcinoma,transabdominal ultrasound .,as of a moderate diagnosticvalue, for the weak informative data of the prostaticinside echopattern and echotexture. Transrectal ultrasounddetermines prostatic mass, diagnose prostatic cancer andevaluates exact staging of prostatic cancer and pathologyof the seminal vesicles.Clinical staging is most accurate when the results ofultrasound are combined with digital rectal examination,biochemical markers and other studies. The use oftransrectal ultrasound in combination with the bioptysystem had made diagnosis and staging easily attained usingone comprehensive procedure. In an outpatient settingbiopsy may be performed immediately after finding a suspectlesion.------ - ----Summary and Conclusion 137TRUS is twice as sensitive than digital rectalexamination. To diagnose prostatitis the followingultrasound features were identified, high density and midrange echoes, echo lucent zones, capsular irregUlarity. Thehigh density echoes represent corpora amylacea; the midrange echoes inflammation; fibrosis and the echoluscentzone inflammation.CT scanning has no appreciable role in differentiationof different types of prostatic diseases. It was of nobenefit in early prostatic carcinoma but can be used inlate cases to assess extraprostatic extension and detectionof lymph node status. CT understaging of cancers may occurif microscopic invasion of tumour to surrounding structureswas present or due to inability of CT to identifymetastatic deposits in a normal sized lymph node. Also CToverstaging of tumours can occur when there is insufficientbody fat, makes delineation of tissue planes impossible.MR imaging has proved quite unreliable for detectionand diagnosis of prostatic cancer. On the other hand, itappears promising in the staging of prostatic carcinomabecause of excellent contrast resolution and multiplanarcapabilities that enable separation of the prostate fromadjacent structures.Isotope scanning is the most reliable method indetecting distant bone metastases in prostatic carcinoma.