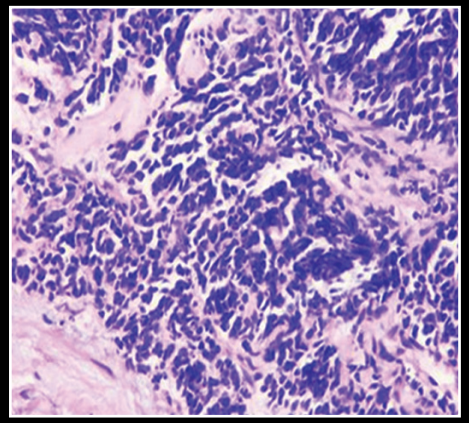
PATHOLOGIC FINDINGS

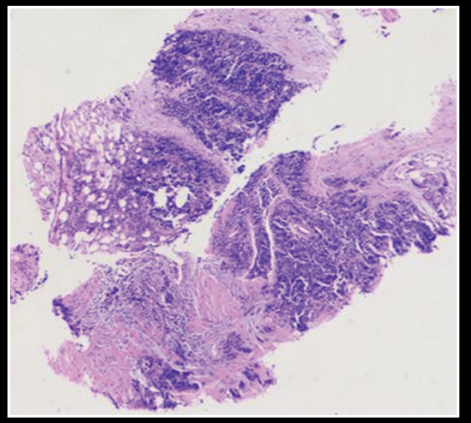
Based on the ultrasonographic findings, a prostatic needle core biopsy was performed. The sections from the needle core biopsy revealed sheets and nests of small round to slightly polygonal cells. The individual cells displayed oval to angulated nuclei and finely granular "salt-and-pepper" chromatin, and scant cytoplasm; the cell borders were indistinct and prominent nuclear molding was observed. Abundant mitotic figures and coagulative tumor cell necrosis were present.

Multiple step serial sections failed to reveal acinar adenocarcinoma of the prostate gland and urothelial carcinoma components. A battery of immunohistochemical stains was performed. The tumor cells revealed immunoreactivity for chromogranin (CG), synaptophysin (SYN), and CD56.

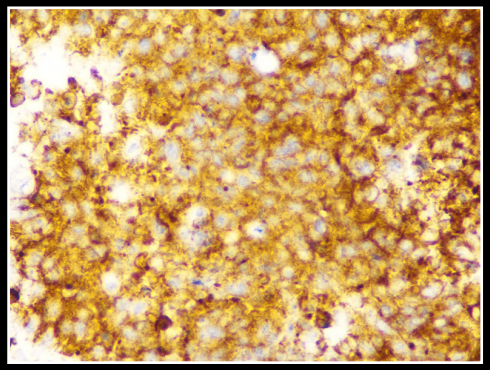
The Ki-67 proliferation index was 50%. The tumor cells were negative for cytokeratin (CK)7, CK20, prostate specific membrane antigen,



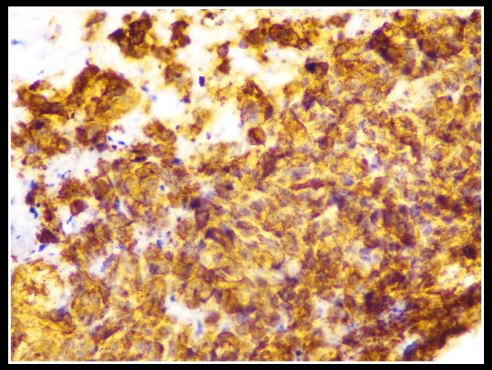
H&E 20X



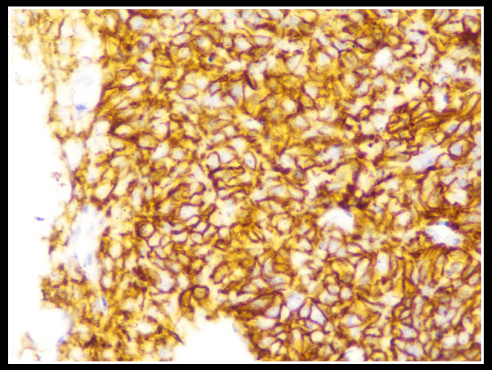
H&E 4X



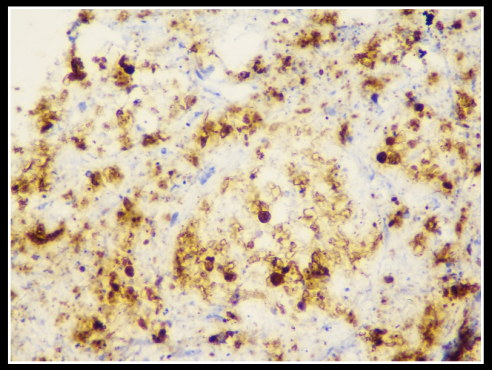
SYN



CG



CD56



Ki-67

prostate specific antigen (PSA), CK5/6, CDX2, GATA3, thyroid transcription factor-1 (TTF-1), p63, cyclin D1, and androgen receptor (AR).