Hemorrhagic Shock After TRUS-guided Prostate Biopsy Successfully Treated With Endoscopic Therapy

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Introduction

Prostate cancer is the leading cause of malignancy and the 2nd overall cause of cancer related deaths for men in the US today. Diagnosis involves transrectal ultrasound guided prostate biopsy (TRUS-guided prostate biopsy), which has remained the gold standard. It provides a rapid diagnosis with a relatively low complication profile. Post biopsy, patients may commonly experience mild rectal bleeding, prostatitis, hematospermia or hematuria. However, one of the rarest complications of TRUS-guided prostate biopsy is massive rectal bleeding requiring angiographic or endoscopic therapy. In literature to date, only a few case reports exist describing this. We present a case of hemorrhagic shock after TRUS-guided prostate biopsy that was successfully treated with endoscopic hemoclipping and epinephrine injection.

Case Description

A 64-year-old male presented with 6 episodes of small volume hematochezia six days after he underwent a TRUS- guided prostate biopsy. Initially, he had normal vitals with a hemoglobin of 8.2 g/dL, compared to a baseline of 13.0 g/dL. On day two, he developed four large episodes of hematochezia, profound hypotension, and had an episode of syncope. The hemoglobin had dropped to 5 g/dL. CT angiogram showed no active bleeding. Massive transfusion protocol was initiated. Emergent flexible sigmoidoscopy showed a raised arterial-appearing lesion with active oozing in the rectum (Figure A 1a). Four hemoclips and 4cc of epinephrine were injected into the lesion, achieving hemostasis (Figure A 1b). Post endoscopy, the patient's hematochezia resolved, and his hemoglobin stabilized. Patient suffered no further complications and was discharged home 48 hours after the endoscopy.

Images

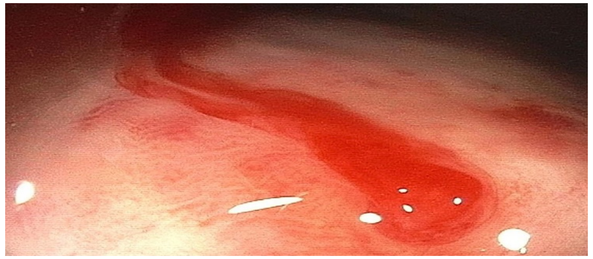
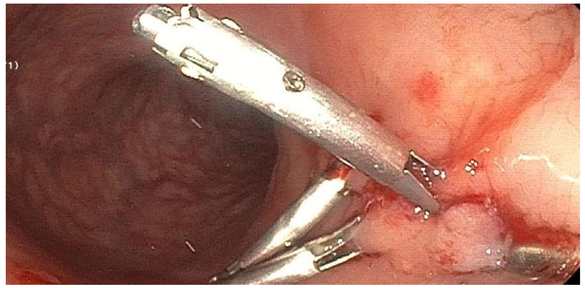


Figure A 1a: this image demonstrates an arterial appearing lesion with oozing in the rectum



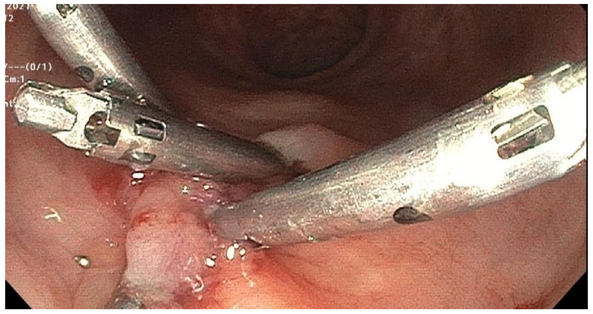


Figure A 1b: these images demonstrated hemostasis achieved after 4cc epinephrine injected and 4 hemoclips were placed

Discussion

Mild rectal bleeding after TRUS-guided Prostate biopsy is common, the management is usually supportive care. Rectal gauze for tamponade can be used to control most cases of rectal bleeding. The risk for post-intervention hemorrhage can be increased depending on the amount of core biopsies taken. Uncommonly, these patients can progress to massive bleeding or hemorrhagic shock requiring radiologic or endoscopic therapy.

Endoscopic options consist of local epinephrine, sclerosant injections, thermocoagulation, banding, or hemoclips. Recognizing the potential of severe bleeding after TRUS-guided prostate biopsy is integral in deeming who may benefit from early endoscopic therapy.

Conclusion

Rare cases like these stress the importance of a careful history and clinical assessment prior to performing any intervention. Prior to TRUS-prostate biopsy, knowing if a patient has a history of hemorrhoids, dieulafoy lesions, or is on anticoagulation becomes a fundamental part of further management.

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