

# [Although 12 a small number of patients](https://assignbuster.com/although-12-a-small-number-of-patients/)

Although ultrasound guided prostatebiopsy is the gold standard, well tolerated and the most common procedure usedin the diagnosis of prostate cancer, but due to limited financial resourcesstill trucut digital guided prostate biopsy is used as diagnostic tool in allthe tertiary care hospitals of Khyber pakhtunkhwa. Although we do not comeacross complications most of the time yet it’s not a harmless procedure. One ofthe most common  complication i.

e. perineal pain is noticed in more than 70% of patients and the frequency isstill on the increasing side due to increase in the number of biopsy chunks5, 6. Undesired events, such as local pain, hematuria, hematospermia, dysuria, and rectal bleeding have been reported in alarge number of patients. Hematuria after biopsy has been reported in up to 60%of cases whereas the frequency of haematospermia is also more or less equal to hematuriai. e. 64%7.

Rectal bleeding is also one of the common complicationreported in 75% of patients and very rarely 1% patients suffer from massiverectal bleeding requiring blood transfusions up to 5 pints 8. Invast majority of patients rectal bleeding is self-limiting and not bothersome. Unlike hematuria and rectal bleeding haematospermia has a transient detrimentaleffect on sexual activity.

A short term exacerbation of lower urinary tractsymptoms has been reported in 6 to 25% of patients with a reported incidence of. 4% urinary retention cases. 9, 10, 11, 12   A small number ofpatients also complains of transient erectile dysfunction which reverses byitself after 1-3 months without any medication13. Infection is one of the adversecomplication represented by prostatitis, epididymitis, Prostatic abscess and sepsis.

Inorder to minimize these complications use of prophylactic antibiotics are usedas standard of care. 14, 15, 16, 1 7Ciprofloxacin is the drug of choicesince long time because of the broad spectrum activity and high concentrationin prostatic tissue. As the resistance to ciprofloxacin’s is on rise so some ofthe surgeons are using multi drug prophylaxis 18. Fever associatedwith genitourinary symptoms is described in 3–10% and septicemia in 5% ofpatients following a biopsy of the prostate.

Despite agreement on antibioticprophylaxis, the timing, duration of the regimen, and the route of administrationremain controversial. Commonly an antibiotic regimen of at least 3 days hasbeen used. Despite the use of prophylacticantibiotics, the development of infectious complications after biopsy remainspossible, although its incidence is low. For this reason, a cleansing rectal enemahas been used by some of urologists as a means to reduce infectiouscomplications. Most investigators believe that rectal preparation reduces therate of bacteremia. In a prospective randomized study, Lindert et al.

proposedthat bacteremia might be minimized by a prebiopsy enema. In their study, bacteremia following prostate biopsy occurred in 4% (1 of 25) of patients whohad prebiopsy enemas compared with 28% of those who did not. This studytherefore provided a theoretical basis for using a prebiopsy rectal preparationfor the prevention of infectious complications. While searching internationalliterature it is evident that a minority of patient’s i.

e 1. 1-1. 4% requirehospitalization secondary to sepsis whereas in our study . 2% requiredhospitalization in non-rectal prepared group and none of the patient developedsepsis in the rectal prepared group19.  Even with use of prophylactic antibioticsstill infection chances are there which can be reduced by using povidone iodinerectal swab preoperatively.

When Povidone-iodine  rectal prophylaxis was combined along with useof antibiotics as compare to the only use of antibiotics significant differencewas there with combination therapy. 20 The use of povidone-iodine iswell known in surgical practice and is based on the fact that povidone-iodinehas broad-spectrum antimicrobial activity, including viruses , fungi , andparasites, as well as anti-inflammatory activity. Povidone-iodine is anantiseptic solution extensively used in different concentrations. Allen al et all reported 97% decreasein the colonies after using povidone iodine rectal swab where as in our studythe result was even more significant with 99% decrease in colonies21. Borghesi et al showed that parenteralpiperacillin in combination with a povidone-iodine enema significantly reducesthe incidence of infectious complications22. A meta-analysis of eightstudies reported by Walkeret al showed a significant decrease in the incidenceof bacteriuria and sepsis after prostatic biopsy20.  Intraoperative preparation of the rectum witha povidone-iodine-saturated gauze during trans rectal biopsy of prostatedecreased the incidence of bacteriuria and bacteremia.

We counted bacterial colonies in therectum that had been harvested from rectal swabs before the insertion ofpovidone-iodine and after biopsy to evaluate the bactericidal effects of povidone-iodine. We found that the bacterial colony counts before the rectal preparation weredecreased dramatically after biopsy. These local antiseptic method seems to beone of the cheapest method to decrease the incidence of infectious complications. The data obtained from our studyshows that povidine iodine rectal swab is reliable in preventing infection.

Other anti-infectious enemas increase patient cost. The cost of povidonedineswab is very low. .

After our prospective trial with iodine swab considered, weconclude that the povidone-iodine swab is important to protect againstinfectious complications in patients undergoing biopsy of the prostate.