

IS ONE-STOP NURSE PRACTITIONER LED PROSTATE BIOPSY EFFECTIVE AND SAFE?

BRUCE TURNER/URO-ONCOLOGY NURSE PRACTITIONER
 ABDUL CHOWDHURY/UROLOGY REGISTRAR
 JANE WILLIAMS/CANCER & OUTPATIENTS MANAGER
 JHUMUR PATI/CONSULTANT UROLOGICAL SURGEON

HOMERTON UNIVERSITY HOSPITAL NHS FOUNDATION TRUST,
 LONDON, UNITED KINGDOM.

REFERENCE

Department of Health (2000) The NHS Plan: A plan for Investment A plan for reform A summary. London: Department of Health.

Introduction

In the United Kingdom clear guidelines have been introduced to ensure that patients who are suspected to have prostate cancer are referred to a urology department where they must be seen within two weeks of the referral. These patients must then be diagnosed – cancer confirmed or excluded – within 31 days and treatment for those found to have cancer must start within 62 days (Department of Health, 2000).

This has led to new and innovative ways being sought in order to meet these demands and maintain an efficient, effective and seamless service to the patient. Historically prostate biopsies are undertaken by medical staff, but to help accelerate the prostate cancer patient journey we introduced a Nurse Practitioner led one-stop rapid access prostate biopsy clinic in September 2007 which is an addition to our pre-existing non one-stop service.

The main benefits of introducing a nurse led service for this procedure are:

- Fast track prostate cancer diagnosis service
- Continuity of care
- Expansion of nurse practitioner role

We would like to report our results after one year.

One-stop prostate biopsy clinic

- Patients referred to the urology department requiring a prostate biopsy are sent written information regarding the procedure with their initial appointment.
- At their appointment patients have a complete medical history and examination undertaken by the nurse practitioner.
- Patients are counselled for the procedure (if appropriate) and invited to have the procedure immediately.
- Patients are given an intravenous infusion of antibiotics (Piperacillin and Tazobactam (Tazocin®)) followed by 2 oral Ciprofloxacin tablets to take in the evening and following morning. Patients at higher risk of sepsis (diabetics, immunocompromised, taking steroids) are given Ciprofloxacin for 5 days.
- Following the procedure the patient is kept on the ward for one hour or until they have passed urine.
- The patient returns to the nurse practitioner clinic for the results the following week and appropriate referral, staging and MDT discussion arranged.
- The patient is reviewed by both the urologist and oncologist to arrange and discuss specific treatment options.

Aims

To determine the effectiveness and safety of the Nurse Practitioner led one-stop rapid access prostate biopsy clinic.

Materials and methods

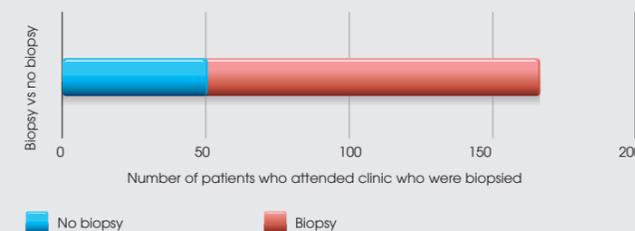
From September 2007 to September 2008 we retrospectively reviewed the records of patients who attended the Nurse Practitioner led one-stop prostate biopsy clinic to ascertain:

- The number of patients requiring biopsy
- The incidence of prostate cancer
- The grade of prostate cancer
- The time period from diagnosis to treatment
- The complication rates

Results

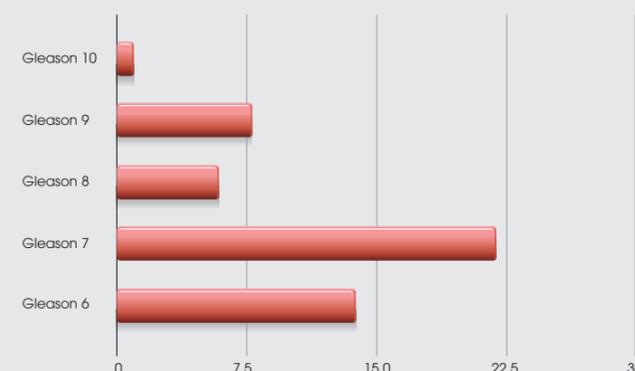
In total 167 patients attended the clinic, 116 of these patients underwent prostate biopsy and 51 did not (as shown in the graph below). Reasons for not undertaking biopsy were patient choice, inappropriate referral (very elderly patients), PSA taken when proven urinary tract infection, clinical signs of prostatitis or patient requested repeat PSA.

Number of patients who attended clinic who were biopsied

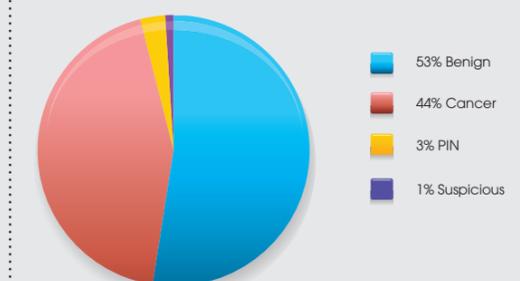


Of these 116 patients 51 were found to have cancer, PIN = 3, Suspicious cells = 1 and inflammation / normal tissue = 61 as shown in the graph below

Gleason scores of patients diagnosed with prostate cancer



Histological diagnosis following biopsy



Complications

- One patient was admitted with frank haematuria following biopsy.
- One patient had acute urinary retention requiring catheterisation and alpha blockade.
- Two patients had self limiting vasovagal syncope immediately following biopsy.
- There were no cases of sepsis.

Waiting times

- All patients seen at first consultation within the required within 14 days of referral.
- All patients were diagnosed within the required 31 day target.
- All patients commenced first definitive treatment within the required 62 day target.
- Audit highlighted a significant reduction in the waiting time to diagnostic test, before commencement of this clinic the mean wait for TRUS was 19 days this has been reduced by one week to 12 days and thus has improved the wait for diagnosis and treatment for these patients.

Discussion

In our practice nurse practitioner led one-stop prostate biopsy is effective, efficient and safe. Since the introduction of this service doctors have been released to spend more time operating which in turn has decreased our wait for operations.

Patients have expressed a preference to having immediate biopsy than having to return at another time to get the biopsy performed.