

## 'Blue Light' Cystoscopy

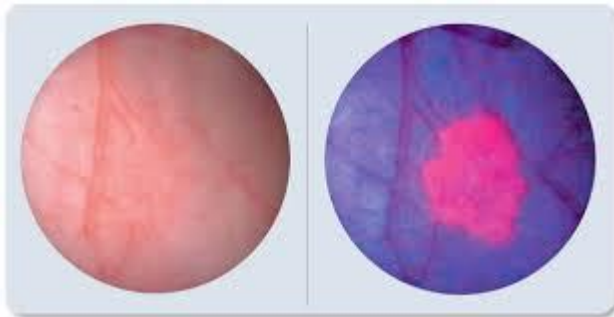
Patients in North Hampshire and Surrey are amongst the first in the country to be offered Blue Light Cystoscopy at the Hampshire Clinic, the North Hampshire Hospital and Frimley Park Hospital. 12,000 patients a year are diagnosed with bladder cancer making it the 5th commonest cancer in the UK. 4,000 of these patients will die of the disease.

In its earliest stages, bladder cancer is treated by 'resecting' the tumour off the bladder wall using a telescope (cystoscopy) under general anaesthetic. However, 35% of patients will get recurrences, so patients with bladder cancer require frequent lifelong cystoscopy of their bladder to detect and treat any recurrence at an early stage. This makes bladder cancer the most expensive cancer to treat! One reason why so many patients get a recurrence is that many tumours are invisible to the naked eye under normal 'white light' (see picture 1). It is also difficult to be sure one had removed all the tumour using 'white light'.

### What is Blue Light Cystoscopy?

Recently a new fluorescent dye has been developed (called Hexvix) which if instilled into the bladder an hour before cystoscopy will be selectively taken up by all bladder tumours. At cystoscopy, a special 'blue light' is used which makes the tumours fluoresce (see picture 2, same as picture 1 but with 'blue light'). This technique is called 'Photodynamic diagnosis' or 'PDD'. The benefit of blue light cystoscopy over standard cystoscopy is that it identifies previously invisible tumours that can then be resected. It also identifies any residual tumour following resection, which can then be removed completely.

Left - White light cystoscopy      Right - Blue light cystoscopy



### Patient benefits:

A medical trial has shown that blue light cystoscopy will reduce the recurrence rate of bladder cancer from 35% to just 10%. If 100 bladder resections were carried out bladder tumours, one would expect about 35 of these to recur and require further admission and resection. With blue light cystoscopy, one would only expect 10 recurrences i.e. 25 patients would remain cancer free and not require further hospital admission and surgery.