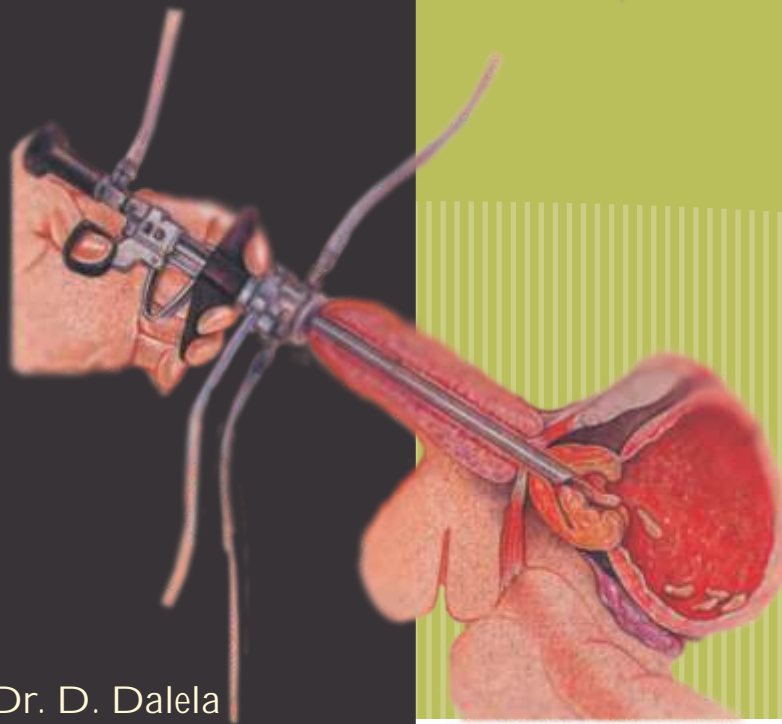
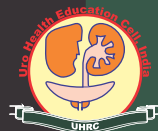


Transurethral Resection of Prostate (TURP)



Dr. D. Dalela



URO-HEALTH EDUCATION CELL
URO-HEALTH RESEARCH CENTER, LUCKNOW

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Transurethral Resection

of Prostate
(TURP)

A patient,s guide book

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A CKNOWLEDGEMENTS

This book on TURP is an outcome of combined and persistent effort of many people. First of all, my patients who posed these questions, were shown the manuscript of 'answers'. Their valuable suggestions added simplicity & clarity to answers. My father Dr. R C Dalela, who him self is a renowned author and editor of leading internal journal, continuously encouraged me to do writing work. My all M. Ch. students, departmental colleagues have been source of information and inspiration my wife Dr. Abha, son Deepansh and daughter Disha looked at the manuscript at various stages, Mr. Jai Prakash & Mr. Ankit Malhotra made illustrations, Mr. Sanjay kumar and Mrs. Urmila Shukla composed & designed the book and Mr. Sunil Baijal brought the book is present shape by printing it . All my book is appreciated by the patients and professional colleagues , the credit should go to all these people.

- Dr. D. Dalela



What is the need for this book?



Respected Sir,

You have been suffering from the prostatic problems for long and now you have decided to undergo the operation for the same.

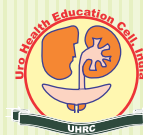
This book is aimed to satisfy all your queries regarding the operation, your postoperative period in the hospital and life after operation. To make this book universally appealing, a number of problems and side effects have been mentioned here—but it does not mean that you are going to have all these problems. These are just written with the intention that in case you develop any of them, you will know beforehand how simply are they handled thus minimizing your anxiety.

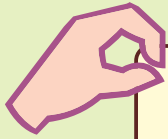
We are committed to give the best results of your operation and hope that, our effort of imparting you all the knowledge regarding your operation will benefit you in overcoming all your doubts and help in speedy recovery.

With regards

Divakar Dalela

URO-HEALTH EDUCATION CELL
URO-HEALTH RESEARCH CENTER, LUCKNOW





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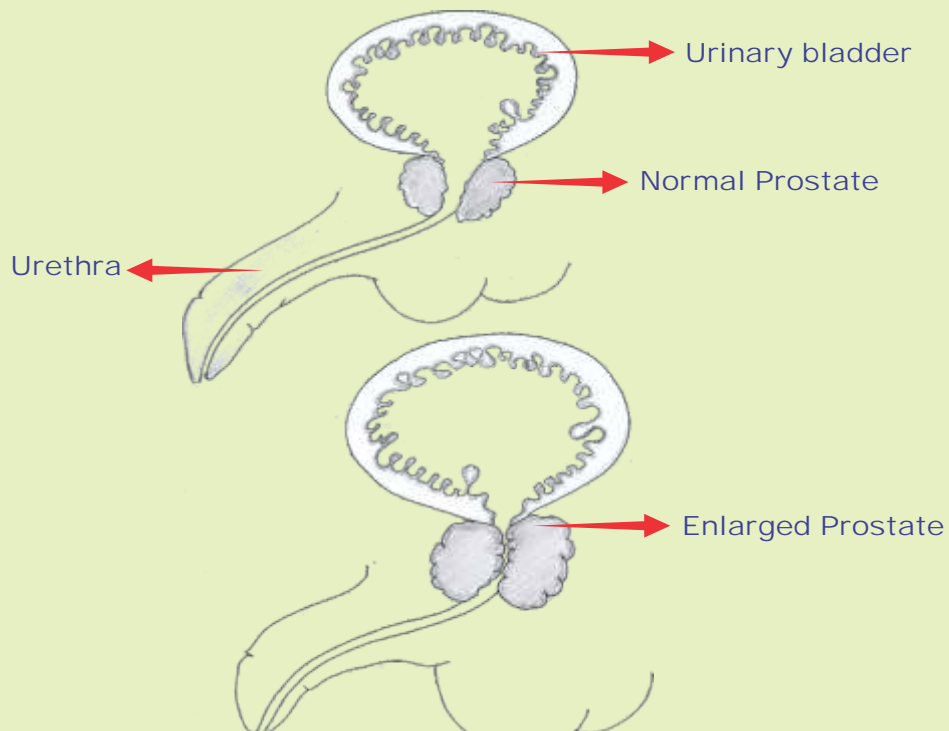
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General information about prostate

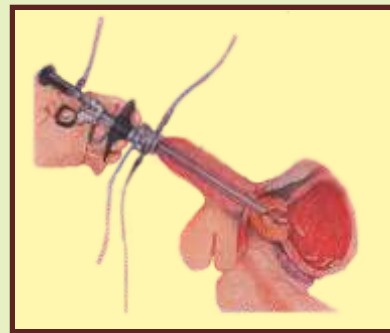
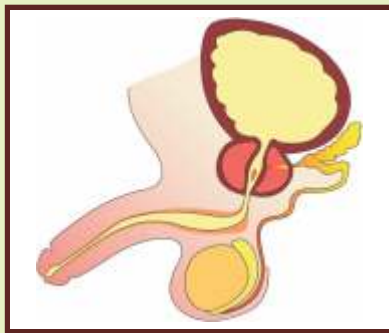
Prostate is a small walnut-shaped gland which is an important part of the male genital system. It is situated below the urinary bladder and surrounds the urethra. It makes an important ingredient for the semen which helps in sperms motility and vitality.

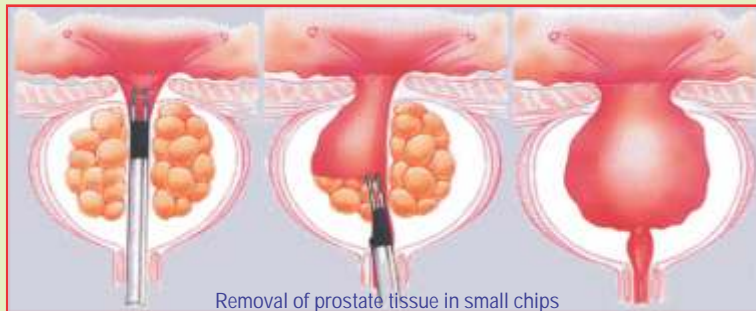
The prostate gland increases in size in men above 50 years of age. It is in fact a part of aging process just like you get cataract in your eyes or you develop graying of hair. Due to the increase in size of the gland or inflammation of gland the urethra is compressed leading to obstruction in urinary flow. Previously the prostate gland was removed by a big and complicated open surgery, but now with the help of modern techniques the prostate can be removed endoscopically without any incision or open surgery.



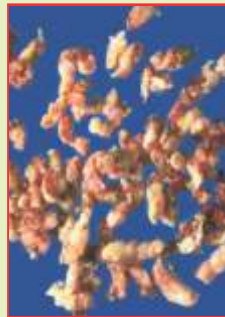
What is TURP technique?

This operation is performed mostly by giving spinal anesthesia into the lower back that makes the lower body numb. In this technique an endoscope is passed into the bladder via the urethra. The enlarged prostate gland is visualized in magnification on the video monitor using the lens and the camera system.





Removal of prostate tissue in small chips



The enlarged part of the gland is sliced into small pieces by the help of a small electrical instrument. These sliced chips are then evacuated from bladder using a special device. In this technique (TURP), no suture or incision is given. The internal bleeding is stopped using the endoscopy cauterization. Thus patient feels minimal discomfort during and after the operation. The majority of the enlarged gland is removed using this technique and mostly the patients don't feel any sort of problems after that.











After operation a siliconized catheter is placed into the urinary passage for three to four days. This catheter helps in evacuating the urine thereby giving time for healing of the internal wound. After removal of catheter you can pass urine freely with full force without any obstruction or problem.

The biggest evidence of the unprecedented success of this technique is that almost 90% operations worldwide for benign prostatic hyperplasia are done using this technique only.



What precautions to take before the operation?

The endoscopic surgery for the removal of the prostate is a highly specialized surgical technique. There are certain points which are important for the preparation of this surgery.

<p>1. If you are taking any anticoagulant medications such as aspirin etc, then please tell it to your doctor. You may have to stop these medications at least 5-6 days prior to surgery.</p>	 
<p>2. If you had any urinary infection in the past and have been advised to take antibiotics, please do continue to take these medications as per your doctor's advice.</p>	 
<p>3. If you are suffering from constipation, then do ask about its remedy from your doctor. As you may not strain for defecation after this operation, you have to get your constipation managed prior to surgery.</p>	 
<p>4. If you experience bouts of cough along with sputum please take proper treatment for it. Taking proper medications and steam inhalation may prevent you from many problems after surgery.</p>	 
<p>5. If you are habitual to smoking Bidi or cigarette, leaving the habit will certainly benefit you.</p>	 

5. If you are taking any **anti-hypertensive medications** then please do tell your doctor. If you are on a salt or sodium-restricted diet too, tell your doctor as low sodium levels during operation may lead to complications. It is advisable for you to check your blood sodium levels before surgery.



6. If your prostate gland is too big (i.e. more than 70cc), your doctor may advise you to arrange one to two units of blood beforehand. This is absolutely essential for your wellbeing during the surgery.



7. If you are allergic to any drug, do tell your doctor at the earliest.



8. If you are suffering from Diabetes, Asthma or have suffered from any disease like epilepsy, or jaundice in the past or if you had undergone any sort of operation in the past, do tell your doctor about the same. If you have experienced any problem during or after that surgery inform your doctor about that and also show your previous records of the same.



How will you recover after the operation?

After your operation till the time of your stay at hospital (approximately 2-3 days), you may experience some small problems that may worry you. All these problems are very small and are either self-resolving or can be effectively and easily managed by your doctor and nursing staff. Some of the problems are discussed below :

Some Routines



Postoperative position in bed

You have to lie down straight in bed for 10-12 hours after the operation. Sometimes the doctor may even advise you not use pillow for sometime. This is done to prevent problems like excessive headache from the spinal anesthesia. Sometimes you may also be advised to keep a pillow under your legs; this is done to maintain your blood pressure. Adhering to the instructions will result in speedy recovery and prevent complications.



Starting meals and drinks

If everything remains normal, you can be allowed by your doctor to have water along with few biscuits just 3-4 hours after the surgery. Later on the day of surgery, you can take light meals which you can digest easily while lying down like vegetable soups, fruit juices, porridge etc.





Getting ambulatory after operation – Resuming walking and sitting

If everything remains well, you will be allowed to get up and start walking on the third day of surgery. It is advised to do bed rest after surgery but absolute bed rest is not necessary. When you start walking then tell the duty nurse to empty your Urobag and then you start walking holding the Urobag carefully in your hand. If you start walking with a full bag, chances are there that this bag may accidentally fall and get entangled in your legs. This may result in sudden traction and impact on the operation site in the prostate and may lead to bleeding.



Postoperative administration of intravenous fluid

You will be administered intravenous fluids for 10-12 hours after the operation. The type, quantity and strength of fluids is decided by your doctor only after duly considering your body weight, your other diseases and your health. If you experience some shivering during administration of the fluid, the duty nurse may temporarily stop this fluid but this is not going to harm your body.





New problems after passing stools

Sometimes after passing stools, you may notice some blood drops by the sides of the catheter. Even the urine collected in the Urobag may also be slightly red in colour. This get resolved spontaneously by increasing the water intake and taking rest. If it is not resolving spontaneously tell your doctor about it. This usually happens due to straining during passing stools, so try to pass stools without any straining. Wipe away the blood droplets on the sides of catheter by moist cotton. We recommend to apply antibiotic cream on the tip of penis and protect it by a gauze piece to avoid the soiling of your clothes by these blood drops.



Shivering after operation

Sometimes you may feel slightly feverish along with mild shivering. Don't get anxious, this can be easily managed with a shot of injection Avil within 20-30 minutes. This happens due to infusion of intravenous glucose or the fluid used for catheter irrigation. **You may also experience mild redness in urine during this period of shivering, but this resolves spontaneously once shivering stops.**

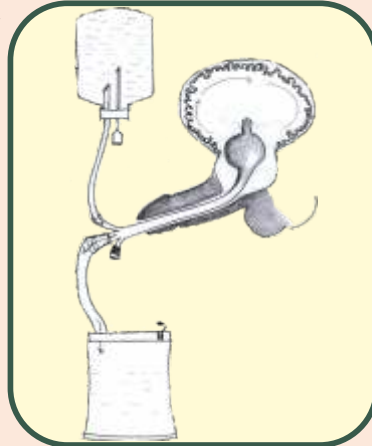


Some deviations



Avoiding blockade of urethral catheter by blood clots

As this operation is done endoscopically by passing the endoscope through urethra, no superficial wound is visible but there is a small wound near the bladder neck. In order to hasten the healing of the wound, a tri-way rubber catheter is placed in your bladder. A special fluid is passed into the bladder through this tube which continuously washes the wound and thus prevents formation of blood clots by continuous dissolution of blood that is oozing through the wound. This catheter is removed 3-4 days after surgery.



Postoperative cough or problems with breathing

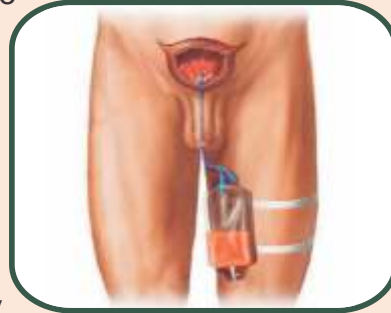
Those patients who have some problem with breathing or have chronic cough problems, should consult the doctor about it, as strong bouts of coughing may start some bleeding. Proper treatment is necessary for this cough.





Small amount of blood in catheter and Uro-bag

The urine collected in the Urobag via the catheter is slightly pinkish in colour. This is controlled through the special fluid drained into the catheter, but sometimes the urine may become dark red in colour with few clots in the catheter. If so happens, contact your doctor immediately. He can handle this situation quite easily and efficiently, so you don't have to worry about it.



Sudden blockade of catheter

Sometimes the catheter may get blocked due to the blood clots or the resected chips of the prostate. As per the figure given on page 3, your bladder is continuously filled with the special fluid and now that the outflow of that fluid has been blocked, your bladder fills up with the fluid and you may feel strong desire to urinate along with pain in lower abdomen. If so happens, contact the duty nurse immediately as she knows how to handle the situation by clearing up the catheter blockade. The catheter is generally cleaned by pumping or with the use of a big syringe.





Passing stools after operation

You will be made to pass stools using an enema prior to surgery so it is possible that you may not pass stools the next day. So you don't get worried about it. The doctor may advise you some medications for stool softening and also to prevent straining during passing stools. If you are taking stool softeners and laxatives, or if you are habitual of passing stools only with help of a specific drug, then do tell your doctor about it.



Sudden onset of colicky pain in lower abdomen radiating to tip of penis

Some men feel mild pain and burning in the lower abdomen or at the tip of penis. There may be a strong feeling that urine is going to come from the sides of catheter. Some men may even pass sufficient quantity of urine by the catheter side of. This is due to the irritation of trigone by the balloon of the catheter. During passing of the stools the "Trigone" of the bladder, which is a highly sensitive part of the bladder gets irritated by the catheter balloon resulting in sudden and strong desire to urinate. For the same reason you feel pain at the tip of the penis. This problems mostly gets resolved after sometime but if continues for long time and becomes troublesome, consult your doctor.





Slight mucus discharge from sides of catheter

Till the time you are on catheter, some amount of blood and mucous gets discharged from the sides of catheter and sticks to it. Please wipe this with the help of moist cotton carefully and apply an antibiotic cream over it. You will not feel any sort of pain or tingling at the tip of penis after that. If you have retracted the foreskin of your penis while doing so, don't forget to pull back the skin at its place.



Small amount of blood escaping from sides of catheter or penis

There might be some small quantity of blood oozing from the sides of the catheter and may stain your clothes. This stops spontaneously after one to two days. Sometimes this blood may clot on the tip of the penis and may give a feeling of tightness. To prevent this, wipe away the blood droplets with a wet sterile gauze, apply an antibiotic cream and wrap the tip of penis with the sterile gauze.



When will your catheter be removed and what may happen these after?

Usually after three to four days of operation, when the urine becomes clear, your catheter will be removed. If the bleeding continues for more days of if the patient has fever postoperatively or if the prostate size was very large or if the post void urine before surgery was more, 300ml then your catheter may be kept for a longer period of time.



1. After removal of catheter you may experience mild burning and pain during start and end of urination.



2. You may also experience mild bleeding in the urine particularly in the start of urination.



3. There may be mild fever along with shivering.



4. Some patients may experience leakage of a few drops of urine after urination which may wet their clothes.



5. Some patients may experience increase in frequency of urination along with mild burning. This is particularly seen in those patients who have been on catheter for a longer period of time.



6. Sometimes, you may find it difficult to hold urine. The urine may start even dribbling before you reach the toilet. The patient may feel that he has decreased control over his urine holding power.



7. You may pass a few small pieces of flesh along with clotted blood through your urinary passage. These are actually the resected chips of the prostate.



8. Sometimes a big chip of prostate may result in temporary obstruction in urinary flow but when this passes out, the urinary stream again becomes normal.



9. Sometimes due to the inflammation at the operation site, the patient may feel slight pain or may not be able to urinate upon removal of the catheter. Please don't strain in this situation as it may result in mild blood in urination. Consult your doctor about it. It is possible that you may need catheter for a longer period of time. As soon as your doctor determines that the inflammation at the site has regressed he will remove the catheter and all patients get healed eventually.

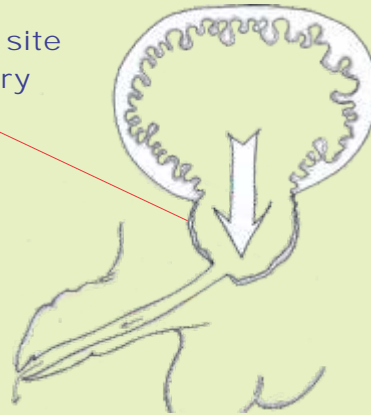


All the above mentioned problems (1-9) are not necessarily going to happen to every patient. Some may get one, while another person may get another or may be some one doesn't get any of them. These are dependent on the patient's body, the size of the gland, urinary infection, the power of bladder wall, and the duration of catheterization. All these problems get cured within two to four days. Please be patient and continue all the medications follow advice given by your doctor. Getting impatient and consulting elsewhere may result in more complications. Please remember the doctor who has operated you knows best about you and your disease and is determined to cure you as early as possible.

What precautions should you take at home after discharge from hospital?

You should remain at home for few days taking all the necessary precautions as advised. Do remember that you have a wound inside at the site of operation of prostate. Normally all the external wounds on human body get healed by 7-10 days but the wound that is made at prostate site may take 3-4 weeks for complete healing firstly because primarily there is a constant urinary flow over the wound and secondly we can not apply any medicine or antibiotic cream directly on the wound. So you have to take the following precautions for about one month after the operation.

Healing area at the site of prostate surgery



- *Drink lots of water* i.e. at least 4 Liters a day. You can also have fruit juices, milk and tea also. This will result in increased urine production and when you pass urine frequently, the prostatic wound will be washed clear of infection and will heal faster.



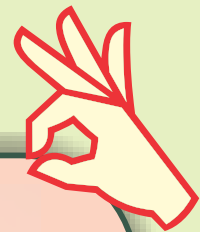
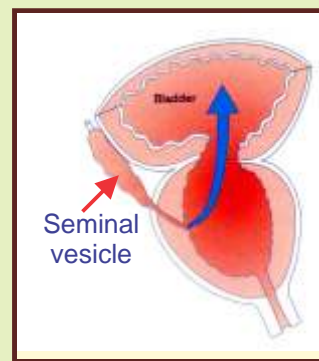
- ❑ *Don't take much of oily and spicy food* as they will increase your constipation.
- ❑ *Try to avoid constipation.* Take medicines as prescribed by your doctor for it. Don't strain too much while passing stools as this may result in appearance of some blood in urine.
- ❑ *Don't cough too hard.* If you are suffering from constant cough, consult your doctor about it and get it treated. Coughing and sneezing too hard may result in undue pressure at the operation site of prostate and may result in mild blood in urine.
- ❑ *Avoid jerky rides* such as on tractor, bullock carts, or horse rides and also avoid long rides on bus, cars etc for 15-20 days after operation. Trains may be a better option for travel.



- ❑ *Avoid strenuous activities* such as climbing stairs rapidly, lifting heavy objects etc., but you can do your normal daily activities.



- ❑ You have to abstain from any sexual activity for at least 4-6 weeks after surgery. This may result in pain and there might be no ejaculation at all. Once you resume your sexual activity you may experience a peculiar feeling of 'dry ejaculation' i.e. You will feel that ejaculation has taken place but semen does not come out. In fact, it goes inside the urinary bladder and you may notice the same in your urine later on. Though, this is little peculiar, but it is completely harmless. In some patients it improves with passage of time while in some it may persist. Some patients also experience decrease in their erection but if you do not have other systemic factors like diabetes etc, this also improve in due course of time.
- ❑ Don't forget to take your medications as advised by your doctor and also don't try to change any medication on your own.



When to contact your doctor?

- If you are experiencing constant blood and clots in your urine.
- If you are having high grade fever along with chills and shivering.
- If you are having increased burning and pain in urination or you have increased frequency of urination.
- If you are feeling more obstruction in urination and having pain and swelling in lower abdomen.
- If your urinary stream becomes thin in future. This may possibly be due to some constriction in your urethra. This problem can be cured fully if diagnosed and treated at the right time.



Some important Points

- All the chips of the prostate which are taken out are sent to the pathology lab for histopathological evaluation. Please don't forget to take the report from the lab and show it to your doctor.
- Few patients (only 1-2%) may continue to suffer from some urinary problems due to weakness in urinary bladder muscles or due to some unknown reasons. With proper investigations and due course of medications, these patients also get cured in time.
- Only one percent patients who have completely lost their power to control urine may take four to six months for complete recovery.



Dr. Divakar Dalela

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Lucknow

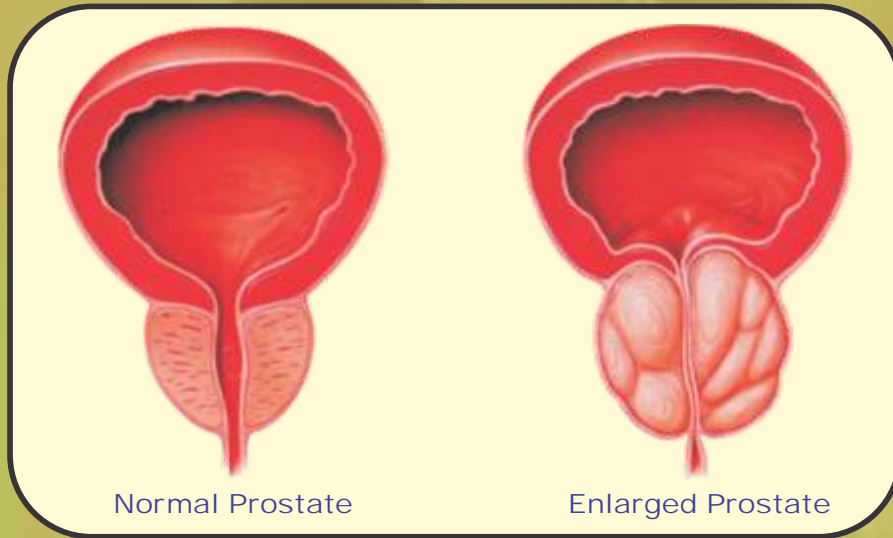
Prof. D. Dalela is an internationally renowned Urologist, committed to spreading the Urological knowledge not only amidst medical students but also amongst the nursing community, practitioners of alternative medicine, paramedical personals and patients.



He joined K.G. Medical College Lucknow as medical graduate in 1979. He completed his MBBS with lot of hard work and gathered 6 silver medals, 18 Gold medals including. The prestigious Hewett gold medal in the year 1983 for being the topper of his batch. He completed his M.S. (Surgery) from K.G. Medical College in year 1987-88 and then proceeded to Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow to obtain M.Ch. Urology degree in 1991-92. Ever since, he has been working as a faculty member of K.G. Medical University and is credited with establishing a fully equipped Dept. of Urology during his Headship. His penchant for research is equally strong. He has published over 110 research papers, innovated 14 specialised urological operating techniques, innovated three urological instruments and developed many urological softwares. Through his 'Uro-Health Education Cell' he has written 15 patient education pamphlets in English, 15 in Hindi, five operation guide book both in Hindi & English and five urology disease books in both languages and the Hindi version of his book on catheter has been awarded Third Prize by ICMR in 2008 as the "Best Popular Medical Book." He has travelled to over ten countries to present his research work in various conferences and has been Operating Faculty in many live operating workshops. He has been awarded FAMS in urology by seational Academy of Medical Science in 2009.

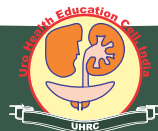
Dr. Dalela is very popular amongst his students as a teacher in urology, and by his efforts, his department is already a frontrunner for its contributions in national and international urology.





Normal Prostate

Enlarged Prostate



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