INSTRUCTIVO PARA LLENADO

- No deben eliminarse los títulos en mayúsculas y negrita.
- Los ** solo indica la existencia de un título/sección, pero no se ve en la plataforma.
- Los ++ corresponde a la sección donde se agregan diagnósticos adicionales.
- Los ## indica secciones rellenables en la ficha (título + contenido).
- Que no se debe alterar el orden de las secciones.
- El contenido editable corresponde al texto que aparece en cursiva azul.
- Todo párrafo debe terminar con un punto.

** TÍTULO DE LA COMPETENCIA

MANAGING PATIENTS WITH ACUTE URINE RETENTION

** DIAGNÓSIS / SITUACIÓN 1

ACUTE URINE RETENTION

** DIAGNÓSIS / SITUACIÓN 2

ACUTE BACTERIAL PROSTATITIS

** DIAGNÓSIS / SITUACIÓN 3

BENIGN PROSTATIC HYPERPLASIA

** DIAGNÓSIS / SITUACIÓN 4

PROSTATE CANCER

++ OTROS DIAGNÓSTICOS/SITUACIONES...

Other possible diagnoses: urethral stenosis, diabetes, neurological disorders such as multiple sclerosis, Parkinson's disease, Alzheimer's.

COMPETENCIES TO ACQUIRE

GENERAL.

Initial management of patients presenting with acute urine retention (AUR) and application of immediate measures for appropriate diagnosis and treatment. Team management of the syndrome in different care contexts: emergency department, hospital ward, and specialized urology consultation.

SPECIFIC.

Evaluation of the status and clinical history of a patient with AUR.

Differential diagnosis of AUR.

Indications for and interpretation of different diagnostic and complementary tests depending on the diagnosis and the level of care contexts.

Initial treatment and ability to foresee and treat immediate complications.

Teamwork and decision making.

Verbal and nonverbal communication with patients.

Awareness of severity when present and type of care after the initial consultation.

BACKGROUND KNOWLEDGE

Etiology, symptomatology, and immediate complications of AUR depending on its etiology.

Interpretation of vital signs, blood tests, prostate-specific antigen (PSA), urine sediment, and urine cultures.

Interpretation of urinary tract ultrasonography, transrectal ultrasonography of the prostate, and prostate MRI.

Signs and symptoms of possible emergencies or severity (sepsis, postrenal acute kidney injury, etc.).

Indications and contraindications for the different analgesics, antibiotics, alpha blockers, 5/-reductase inhibitors (5ARls), anticholinergics, beta 3 adrenergic receptor agonists, LHRH analogues, antiandrogens, enzalutamide, abiraterone.

Urologic procedures: placement of urinary catheters, placement of suprapubic cystostomy, radical prostatectomy, transurethral prostatic resection, prostatic enucleation with Holmium laser, and open adenomectomy, as well as the possible complications of these procedures.

How to do a digital rectal examination (DRE) to evaluate the prostate and how to do bladder catheterization.

SUGGESTIONS FOR STUDY MATERIAL

Clinical guide with algorithms for symptoms, complications, differential diagnoses, and treatment.

SCENARIO

A cubicle in the emergency department with an examination table and equipment, room in a hospital ward, and a urologist's office, depending on the case.

For the DRE, a mannikin that simulates different prostatic diseases.

MOSAICO TEMPLATES

Students should receive the different templates in the room where they design the cases: Case design template, Students' template for assessing other groups, Teacher's template for assessing the competency being taught.

DIFFERENTIAL DIAGNOSES

Acute prostatitis.

Benign prostatic hyperplasia.

Prostate cancer.

CASE DOCUMENTS

Clinical guide Urine sample: pyuria Vital signs: if with sepsis: fever, hypotension, tachycardia Physical examination: painful DRE; warm, enlarged prostate Blood test: leukocytosis with a left shift, elevated C-reactive protein (RCP) Urine sediment: microhematuria, bacteriuria, nitrites + Urine cultures: positive for Gram-negative bacteria.

Clinical guide Urine sample: clear urine Vital signs: normal Urine sediment: microhematuria, nitrites -, bacteria + Physical examination: Pain on palpation of the hypogastrium dull percussion. On DRE, prostate is well-delimited, enlarged, mobile, adenomatous, nonpainful, and has no suspicious nodules Blood test: no significant abnormalities, or if renal insufficiency is present due to chronic urinary tract dilation. elevated creatinine. decreased glomerular filtration rate, altered Na+ and Kt; Urinary tract ultrasonography: bladder balloon; Significantly increased prostate volume; If chronic urine retenton, bladder diverticula.

Clinical guide Urine sample: clear urine micro-macrohematuria could be present) Physical examination: prostate (estimated size), not painful, a stonelike nodule Is palpated in the right prostatic lobe Blood test: possible anemia (low Hb and hematocrit); Elevated PSA Urine sediment: micro/ macrohematuria, nitrites -, no bacteria, Urinary tract ultrasonography: bladder balloon; Hypochoic area in the prostate; Possible unilateral urinary tract dilation; Transrectal prostatic ultrasonography: hypochoic area in the prostatic lobe where the nodule was palpated Prostate MRI: suspicious area (PIRADS 4) in the right lobe Prostate biopsy (know the procedure and the necessary preparations).

SUPPLIES

Hospital emergency department cubicle: examination table, sphygmomanometer, stethoscope, thermometer Material for urinary catheterization: sterile gloves, urologic lubricant, 18F and 16F Foley catheters, sterile cloths, gauze, povidone iodine, 10 ml ampoules physiological saline, 10 cc syringe, urine drain bag; Labeled mock drugs: Cefuroxime (750mg vial), Ciprofloxacin (200mg in 100mL), Diclofenac (50 mg pills), Ibuprofen (600 mg pills).

Primary care emergency area: examination table, sphygmomanometer, stethoscope, thermometer Material for urinary catheterization: sterile gloves, urologic lubricant, 18F and 16F Foley catheters, sterile cloths, gauze, povidone iodine, 10 ml ampoules physiological saline, 10 cc syringe, urine drain bag.

Hospital urology consultation: examination table, sphygmomanometer, stethoscope, thermometer Material for urinary catheterization: sterile gloves, urologic lubricant, 18F and 16F Foley catheters, sterile cloths, gauze, povidone iodine, 10 ml ampoules physiological saline, 10 cc syringe, urine drain bag, Guyon catheter guide, Tiemann 18, 16, and 10 two-way bladder catheters with balloon, ultrasound scanner, cystoscopy image monitor, sterile surgical drapes.

MOST COMMON ERRORS

Failure to take general history; Failure to examine the patient and assess vital signs; Requesting tests inappropriate to be carried out in the emergency department; Failure to identify signs of severity; Failure to re-assess after treatment (in this case, request urine cultures after treatment); Inadequate communication with the patient.

Same as for acute prostatitis, plus: Failure to reassess after treatment (urinary catheterization) not knowing the treatment for benign prostatic hyperplasia; If acute kidney disease withdrawing the catheter after emptying the bladder balloon instead of leaving it until the end of the study and treating the patient (surgically); Lack of communication between doctors and nurses; Inadequate communication with the patient and patient's family; Failure to establish a discharge plan without applying the criteria for referral to a specialist.

Same as for acute prostatitis, plus: Trivializing the patient's symptoms; Failure to indicate/ know how to interpret imaging tests (Urinary tract ultrasound, transrectal ultrasound, prostate MRI); Not knowing the indications for prostate biopsy; Failure to establish a discharge plan applying the criteria for referral to a specialista.

CONSEQUENCES OF ERRORS

Worsening to sepsis and septic shock; Prostate abscess and failure to indicate appropriate treatment and follow-up.

Not foreseeing the possibility of post-catheterization polyuria and the severe alterations in electrolytes it can cause; Non recoverable kidney failure.

Not identifying cancer due to failure to perform a digital rectal examination and/or necessary complementary tests, leading to delayed diagnosis and treatment.

TIPS

Show participants the entire scenario with all the material and supplies available depending on the care setting, especially the loaded drugs, available technology, etc.

We recommend presenting the cases in the following order: Acute bacterial prostatitis - Benign prostatic hyperplasia - Prostate cancer.

TECHNOLOGY

An intercom or cell phones to connect the professor facilitating the simulation with the aide in simulation.

Simulator for digital rectal examination and for urinary catheterization.

EXPERT ADVICE

Make sure that the participants understand that they will come up against cases at distinct levels of care.

Make sure that the communication between the professor and the aide in the scenario works properly before starting to act out the scenes.

Make sure that the observers can see and hear everything in the scenario and receive the results of the complementary tests at the same time as the treating group.

Make sure that the students know the technique for digital rectal examination and know about prostate lesions beforehand.