

Causes and Diagnosis of Pneumaturia

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DESCRIPTION

The passage of gas or "air" in the urine or the urinary system is referred to as pneumaturia. "Bubbles in the pee" may be the way to describe or characterize this. Enterovesical fistula present with pneumaturia, which is followed by fecaluria and recurrent Urinary Tract Infections (UTI). Other causes of pneumaturia include recent catheterization, emphysematous cystitis, and urinary tract instrumentation. An improper connection between the digestive tract and the urine bladder is known as an enterovesical fistula. Rectovesical, colovesical, ileovesical, and appendicovesical are the four different varieties then colorectal cancer follows. Infection, Crohn's disease, and iatrogenic trauma are additional causes. Pneumaturia, fecaluria, and recurrent UTIs are pathognomonic characteristics that were present in individuals. Colovesicular fistula, a subsequent consequence of diverticulitis, is the primary cause of pneumaturia. Pneumaturia is extremely sensitive and specific for colovesicular fistula diagnosis. Every patient needs a lower endoscopy, a CT scan of the belly and pelvis with oral or rectal contrast and this verifies the diagnosis determines because Surgery is the main form of treatment minimally invasive procedures are preferred, and the majority of patients can have a sigmoid colectomy and primary anastomosis with bladder repair in a single session.

Causes of pneumaturia

A colovesicular fistula is a frequent reason for pneumaturia communication between the colon and bladder. These could develop as a side effect of diverticular illness. Crohn's illness, colorectal or bladder cancer emphysematous cystitis is a Urinary Tract Infection (UTI) caused by a gas-producing bacterium. An infection of the bladder wall called emphysematous cystitis. Increased risk in diabetics and patients with obstructions of the urinary tract outflow. Imaging reveals air within the bladder wall. Antibiotics specifically formulated for urine cultures are the mainstay of treatment. Catheterization and recent instrumentation of the urinary tract, Pyelonephritis with emphysema.

Diagnosis of pneumaturia

Confirming the diagnosis and identifying the root cause are the objectives of the examination. Every patient receives a lower endoscopic examination and a CT scan.

A CT scan with oral or rectal contrast but no IV contrast is the first and best test. This will demonstrate contrast or air in the bladder along with thickening of the colonic and vesicular walls. Although it might not depict the fistula tract itself, it forecasts its location with accuracy. A CT scan can also be helpful for identifying malignancies, defining anatomy, and determining the underlying cause. In comparison to a CT scan, the sensitivity of the cystoscopy test is similarly poor for finding colovesicular fistula. Clinicians typically do not notice the fistula tract, only localized edoema. It is recommended if there is any reason to suspect a malignant bladder fistula, such as a history of bladder cancer, a bladder tumor on a CT scan, or the absence of colonic pathology.

An uneven connection between two epithelialized surfaces is known as a fistula. The organs it connects to provide for classification or naming of the structure. To comprehend this disease process and the operation planning, practitioners must comprehend the complex anatomy of the pelvis and the organs it houses. A "colovesicular fistula" is a connection between the colon and the bladder. Typically, the mnemonic friends can be used to remember the causes of fistulas (foreign body, radiation, inflammatory bowel disease, epithelialization, neoplasm, distal obstruction, sepsis infection). Colovesicular fistulas' prognosis is mostly determined on the underlying cause. Colovesicular fistulas are typically caused by benign diverticular disease, which has a good prognosis. Conservative management of colovesicular fistula have found minimal to no difference in rates of septicemia, renal failure, and mortality. After the acute infection has subsided, patients with the symptomatic diverticular illness should undergo a colonoscopy for evaluation for patients with complex diverticular disease.

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