

Successful Treatment of CAPD Peritonitis caused by *Moraxella Catarrhalis*

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Introduction: Peritoneal dialysis (PD) as a method of treatment in end stage renal disease (ESRD), complementary to hemodialysis (HD) and kidney transplantation, is based on simultaneous daily exchange via a peritoneal catheter. A major complication of this home dialysis method is peritonitis. According to a report by the International Society for Peritoneal Dialysis, the fatal outcome was reported in less than 5% of total episodes of peritonitis, but indirectly it cause same in nearly 18% of episodes. Leading causes are saprophytic gram-positive microorganisms that originate from the skin. An unusual case of peritonitis due to *Moraxella catarrhalis* was reported. Based on relevant literature data, there were only 8 reported cases of peritonitis due to this pathogen prior to my paper.

Case Report: A male, 59 age, on peritoneal dialysis modality due to diabetic nephropathy was admitted to our hospital due to CAPD peritonitis. After initial empiric treatment and absence of positive therapeutic result, we have considered extraction of PD catheter and emergency transfer to HD due to refractory form. On the 5th day after admission, we have got result of in meantime conducted additional identification with isolation of this infrequent causer. After antibiotic susceptibility testing, we completely changed our therapeutic approach and after two week antibiotic treatment we have got complete recovery.

Conclusions: Peritonitis remains a most serious complication of peritoneal dialysis. Accurate and prompt identification of the causative organism, along with previous starting of appropriate empiric treatment which can cover majority of causes is necessary for positive outcome of this complication. In the absence of initially positive therapeutic result, we have to detect infrequent causes in the purpose of rescue catheter and this ESRD modality.

Peritoneal Dialysis: Peritoneal dialysis is a kidney insufficiency treatment that filters your blood in your body using the fastening of your abdomen or abdomen. This lining is called peritoneum by health care providers. As treatment starts, the solution for dialysis – salt water and other chemicals – is flowing through the abdomen from a bag via the catheter. When the bag is empty, you can lower it and place a cap on your catheter so that your normal activities can be moved around. The dialysis solution absorbs waste and extra fluid from your body while you are inside your bowels. The solution and the waste are drained into the empty sac from your abdomen after several hours. In a toilet or bath you can throw away the solution. Then start with a new bag of solution for dialysis. It absorbs waste quickly if the solution is fresh. Filtering slows over time. Therefore, you need to repeat four-to-six times daily the process of emptying the used solution and replenishing your belly. The process is known as an exchange.

Types of peritoneal dialysis:

Peritoneal continuous outpatient dialysis (CAPD)

Peritoneal continuous dialysis

The major differences between the two peritoneal dialysis types are

Exchange timetable

You use one computer, and you do the other by hand

Peritonitis:

Peritonitis is a peritoneal inflammation, which lines and supports most of your abdominal organs in the inner wall of the belly. Bacterial or fungal infection usually causes peritonitis. Peritonitis can quickly spread untreated and can spread to the blood (sepsis) and other organs, causing multiple organ insufficiency and death. So it is necessary to seek prompt medical assessment and treatment, which can prevent potential fatal complications, if you develop any symptoms of peritonitis — the common ones of which are severe abdominal pain.

Causes of Peritonitis:

The two main peritonitis are main spontaneous peritonitis, peritoneum growth, and secondary peritonitis that typically occurs when infection or abdominal cavity injury causes infectious organisms to invade the peritoneum. Both peritonitis types are dangerous for life. The peritonitis death rate is based upon many factors, but in people who also have cirrhosis it may be as high as 40%. Subsequent peritonitis can cause up to 10 percent to die.

Primary spontaneous peritonitis has the most common risk factors:

Cirrhosis liver disease such a disease also causes an increase in abdominal fluid (ascites).

Relief of peritoneal dialysis. Relief it requires implanting a catheter in the peritoneum and removing waste products in people with kidney disease from their blood. It is associated with a higher peritonitis risk because of the peritoneal accidental catheter-contamination.

Treatments for Peritonitis:

You will be admitted to a hospital if you are diagnosed with peritonitis. Typically, intravenous antibiotics or antifungal medications are immediately received in the treatment of the infection. If organ failure from sepsis occurs as a complication of infection, more supportive treatments are needed. Therapies such as intravenous fluids, blood pressure medicines and nutritional support may be considered. You may get drugs that

are injected into peritoneal tissue, a strategy that some studies have shown are more effective than intravenous treatments, if you have peritoneal dialysis-associated peritonitis.

Emergency surgery, especially when peritonitis is due to conditions such as appendicitis, a perforated stomach ulcer or diverticulitis, is often required. The affected tissue is being drained surgically, as in the case of an eruption or abscess. Any portion of the peritoneal tissue severely affected by infection will be affected. During your hospitalization, the signs of septic and septic shock are monitored closely, which usually require immediate transfer to an intensive care unit.

Preventing Peritonitis:

The doctor may prescribe antibiotics to prevent peritonitis for select people with cirrhosis and ascites. Although peritonitis can be a complication of peritoneal dialysis, it is considerably less common than it was in the past with improved technologies and self-care techniques taught during first training. When you have peritoneal dialysis, the following tips will reduce the peritonitis risk:

Clean your hands thoroughly before touching the catheter, both between your fingers and under your fingernails.

Wear a mask of the mouth / nose.

See the right technique of sterile exchange.

Apply an antibiotic cream every day to the catheter outlet.