

## Clinical Image

# Scrotal Edema in a Patient with Liver Cirrhosis

Hou F<sup>1,2#</sup>, Qi X<sup>1\*\*</sup>, Li H<sup>1</sup> and Guo X<sup>1</sup>

<sup>1</sup>Department of Gastroenterology, General Hospital of Shenyang Military Area, China

<sup>2</sup>Liaoning University of Traditional Chinese Medicine, China

\*Corresponding author: Xingshun Qi, Department of Gastroenterology, General Hospital of Shenyang Military Area, Shenyang 110840, China

#Feifei Hou and Xingshun Qi contributed equally to this work

Received: September 05, 2016; Accepted: September 17, 2016; Published: September 20, 2016

## Clinical Image

A 52-year-old male with a 5-year history of liver cirrhosis was admitted to our department due to intermittent haematemesis and melena for 8 days and gradually increased severity of scrotal pain for 7 days. He had alcohol abuse for 20 years. On physical examinations, bilateral scrotal edema was observed without redness (Figure 1). In addition, there were positive shifting dullness, both lower extremities swelling, and mild abdominal wall varices. On laboratory tests, white blood cell was  $15.5 \times 10^9/L$ , percent of neutrophile granulocyte was 94.10%, hemoglobin was 34 g/L, albumin 19.8 g/L, total bilirubin was 102.7  $\mu\text{mol/L}$ , serum creatinine was 135.3  $\mu\text{mol/L}$ , and international normalized ratio was 1.79. Child-Pugh score was 14 points, and MELD score was 23.5 points. Blood bacteria culture was positive with Gram positive coccus and saliva streptococcus infection. Bedside ultrasound demonstrated pleural, abdominal, and scrotal effusion. Thus, he was diagnosed with decompensated liver cirrhosis with bacteremia. Diuretics with furosemide and spiro lactone were given. Albumin or blood plasma was also infused. Twenty-two days later, lower extremities and scrotal edema relieved remarkably. And then, he was discharged.

The incidence of acute scrotal swellings is up to 20% in childhood [1]. The major etiology of acute scrotal pain and/or edema includes trauma, inguinal hernia, torsion of the spermatic cord and testis, testicular tumor, insect bites, urinary extravasation, infection, and



Figure 1:

allergy [2-3]. By comparison, the scrotal edema was rarely reported in adults with liver cirrhosis [4]. In our patient, liver cirrhosis related hypoproteinemia was a major cause of scrotal edema. This consideration was confirmed by the fact scrotal edema was remarkably relieved after albumin supplementation and diuretic therapy. Due to financial reasons, liver transplantation was impossible. Further studies should be necessary to explore the prevalence, potential mechanisms, and prognostic impact of scrotal edema in liver cirrhosis.

## References

1. Qvist O. Swelling of the scrotum in infants and children, and non-specific epididymitis; a study of 158 cases. *Acta Chir Scand.* 1956; 110: 417-421.
2. Knight PJ, Vassy LE. The diagnosis and treatment of the acute scrotum in children and adolescents. *Ann Surg.* 1984; 200: 664-673.
3. Klin B, Lotan G, Efrati Y, Zlotkevich L, Strauss S. Acute idiopathic scrotal edema in children--revisited. *J Pediatr Surg.* 2002; 37: 1200-1202.
4. Schnarkowski P, Burkard R, Wolff M. Scrotal swelling in a young male with chronic alcoholism. *Invest Radiol.* 1993; 28: 770-773.