



## Bladder ear Mesane kulağı

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Dear Editor,

Characterised by the hernia of the bladder into the inguinal canal, bladder ear is a rare condition (1). It constitutes 1-3% of the inguinal hernias (2). Bladder ear is generally identified by coincidence or due to urinary tract symptoms. These "bladder ears" is associated with the open inguinal ring in childhood (3). Though often seen in infants, it can be seen in older children and adults alike (2). Cystography is the gold standard for diagnosis (4). To avoid complications such as bladder perforation, diagnosis prior to surgery for inguinal hernia is important and, as it can be mistaken for bladder diverticula in radiological examination, it is a condition that has to be kept in mind at all times.

A 5-year-old female patient, who was followed at a peripheral centre due to recurrent urinary tract infection, was referred to our clinic because of bladder diverticulum suspicion and a pre-diagnosis of bladder diverticulum. Suspected for vesicoureteral reflux in the urinary tract ultrasonography during the previous follow-up sessions, the patient had previously undergone voiding cystourethrography (VCUG) and shown excessive accumulation on the right side (Figure 1).

The patient was diagnosed with bladder ear and offered to attend follow-ups after antibiotics administration. Symptoms having disappeared, the follow-ups of the patient still continues smoothly.

The bladder may herniate into the inguinal canal. This condition is also known as the bladder ear. 1-3% of the inguinal hernia cases are bladder ear patients (3). Therefore, this condition barely comes to mind and is difficult to spot. It is especially seen during infancy. Because the bladder is abdominally located in children and is close to the internal inguinal ring, it is thought that bladder ear occurs in infants more frequently (5).

Bladder ear cases are usually asymptomatic and can be confused with bladder diverticula. In order to avoid bladder perforations during inguinal surgery, it is therefore important to diagnose this condition before the operation (2).

The gold standard for the diagnosis of bladder ear is cystography. During the cystography, it can be seen that side wall of the bladder herniates into the right inguinal canal through the open processus vaginalis. These bladder ears are often evident during straining and they disappear when the bladder is full (6, 7). They can be distinguished from bladder diverticulum by the disappearance of herniation in entirely full bladders (8).

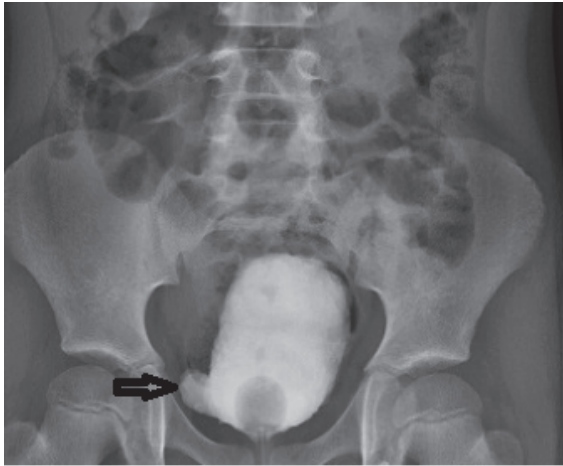
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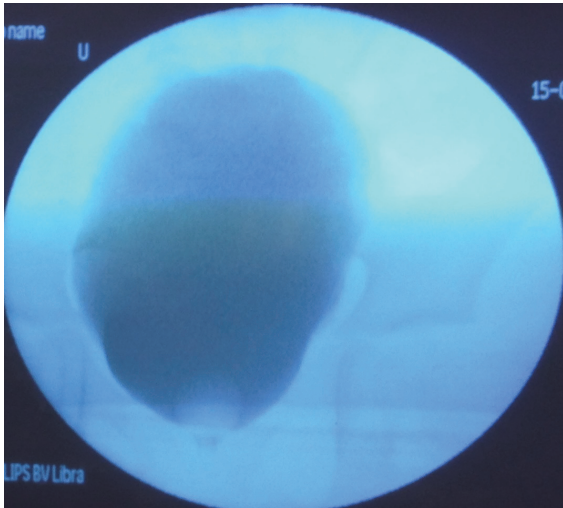
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**Figure 1.** Excessive accumulation in the bladder on the right in cystographic view is noticeable.

This picture had formerly been considered as bladder diverticulum and the patient had been offered treatment and followed for diverticulum. On physical examination, there were no signs except for suprapubic tenderness. Complete blood count and blood tests were normal. Due to recurrent urinary tract infections, we decided to perform cystoscopic examination. Cystoscopic examination showed no sign of diverticulum; additionally, the cystogram conducted with the bladder filled with saline and opaque material showed that diverticular structure disappeared (Figure 2).



**Figure 2.** The disappearance of excessive accumulation in full bladder in cystogram.

Bladder ear and bladder diverticulum often show clinical presentation in patients with recurrent urinary tract infections. While bladder diverticula can be treated by surgery in case of frequent and treatment-resistant infections, bladder ear, which usually resolves spontaneously, requires symptomatic treatment (9).

In the case presented here, the excessive accumulation observed in the cystogram in the bladder of the patient, who had previously been diagnosed with bladder diverticulum, was assessed as bladder ear. We performed cystoscopic examination and synchronous cystogram to confirm this diagnosis and our decisive diagnosis was bladder ear mimicking bladder diverticulum. Following the medical therapy with symptomatic improvement, the patient is still smoothly developing.

As a result, bladder ear is one of the diagnoses that should be kept in mind since it can be mistaken for bladder diverticulum and can cause complications during inguinal hernia repair.

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