# Lumbar Hernia – Can it be a sign of underlying urological anomaly?

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#### Abstract

Lumbar hernia is an abnormal protrusion in the flanks. Only a limited number of cases have been described in the English literature, since the original description by de Garangeot in 1731. We came across two cases of primary lumbar hernia in the last one year, where one case was having crossed renal ectopia, and the other case had associated maloration of kidneys. No such association of lumbar hernia with congenital urological anomalies is being described in literature. The two cases are being presented to stress the fact that all patients of primary lumbar hernias should be investigated for the presence of underlying urological anomaly.

# INTRODUCTION

The term lumbar hernia describes the extrusion of intraperitoneal or extraperitoneal contents through a defect in the posterolateral abdominal wall. Lumbar hernias are rare and only a limited number of cases have been described in world literature.<sup>1</sup> The description of the first true case has been attributed to de Garangeot in 1731.<sup>2</sup> Lumbar hernias may be classified on the basis of causative factors, with two major categories being congenital or acquired. The primary acquired type are those that occur spontaneously and represent approximately 50% of all reported hernias. Literature is silent about any kind of association between lumbar hernias and congenital urological anomalies.

# CASE REPORT CASE 1

A 35-year-old male was admitted to the surgical ward with the clinical diagnosis of moderate-sized lumbar hernia on the right side. Ultrasonography of the abdomen was done in an attempt to find the exact size of the defect, which surprisingly also revealed crossed renal ectopia. Intravenous pyelography done for assessment of renal functions confirmed renal ectopia (Fig.1). The lumbar hernial defect and renal anomaly were also confirmed by abdominal CT (Fig.2).

#### Figure 1

Fig.1: Intravenous pyelography film showing crossed renal ectopia.



#### Figure 2

Fig.2: Abdominal CT showing an abdominal wall defect in the right lumbar area with absent right kidney



# CASE 2

A 40-year-old female presented with the complaint of a swelling in the left lumbar area compatible with the diagnosis of primary left lumbar hernia. Ultrasonography done to find out the exact size of the defect also revealed malrotation of bilateral kidneys. The finding of malrotation was confirmed by intravenous pyelography (Fig.3).

#### Figure 3

Fig.3: Intravenous pyelography film showing malrotation of bilateral kidneys



Onlay hernioplasty was carried out by flank incision in both patients for the lumbar hernias and both made an eventless recovery.

### DISCUSSION

Lumbar hernias are defined as defects anywhere in the lumbar region and can occur either in the superior or inferior (Petit) triangle. The superior triangle is more constant than the inferior triangle and is the more common site of primary hernia.<sup>3</sup> The predisposing factors for development of acquired lumbar hernia are obesity, old age, debilitating diseases and poliomyelitis. Few studies have reported lumbar hernias after flank incisions and at iliac crest bone harvesting sites.<sup>4</sup> Blunt abdominal trauma is another but rare cause of lumbar hernia.<sup>5</sup>

The congenital lumbar hernias are common in infants and in pediatric age and may be sometimes associated with other congenital anomalies such as renal agenesis, renal ectopia etc.<sup>6</sup> But such association of congenital urological anomalies with lumbar hernia in adults is not mentioned in the literature. Though the present cases were only two with respect to such association, still this calls for attention in view of the fact that lumbar hernia is not so commonly encountered in surgical practice.

The two cases are presented to stress the point that all cases of lumbar hernia should routinely undergo evaluation of the urinary tract at least by ultrasonography.

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