

A Rare Cause of Severe Dyspareunia - Post Osteomalacic Contracted Pelvic Outlet

ŞİDDETLİ DİSPARONİNİN NADİR NEDENİ - OSTEOMALAZİ SONRASI PELVİK KONTRAKTÜR

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Özet

Objective: In this case report, we presented a 28 years old woman applied to our clinic with the complaint of severe dyspareunia, whom the obstruction at the pelvic outlet diagnosed.

Case Report: Bilateral ischial arms resection was performed considering an obstruction at the pelvic outlet after pelvic X-ray and further confirmation with 3 dimensional CT scan.

Result: Postoperatively her vaginal examination findings turned back normal. After one year, she became pregnant with normal coitus.

Key Words: Osteomalacia, Dyspareunia, Pelvic contracture, 3 dimensional CT

T Klin J Gynecol Obst 2003, 13:401-403

Summary

Amaç: Bu olgu sunumunda, 28 yaşında cinsel ilişkiye girmede zorluk yakınması ile başvuran hastada pelvik çıkım darlığı saptandı.

Olgu Sunumu: Pelvik darlık üç boyutlu bilgisayarlı tomografi ile doğrulandıktan sonra bilateral iskion kolları rezeke edildi.

Sonuç: Operasyon sonrası vajinal muayene normal olarak gerçekleştirildi. Bir yıl sonraki kontrolünde hastanın normal ilişkiyle gebe kaldığı anlaşıldı.

Anahtar Kelimeler: Osteomalazi, Disparoni, Pelvik kontraktür, Üç boyutlu tomografi

T Klin Jinekoloj Obst 2003, 13:401-403

Osteomalacia is uncommon in current urban life and societies which have normal diet. Barely has it come up with intestinal malabsorption or after gastric surgery or renal tubular deficiency. Vitamin D is a group of sterol having hormon-like functions. Active molecule is 1,25 dihydrocholecalciferol [1,25 DHCC, 1,25 (OH)₂ D₃] and lands to the intracellular protein receptors. The function of 1,25 DHCC is to maintain the adequate plasma calcium levels. For this function; It provides a) increase in the absorption of the calcium at the intestine b) decrease in the renal loss of calcium c) the state of necessity stimulating the resorption of bones (1,2).

In this case, the patient was presented with pelvic deformity, which is rarely seen due to osteomalacia. Surgical treatment and follow up through the pathologies related with osteomalacia commonly confined with the pathologies of the vertebra and long bones.

Case Report

A 28-year-old woman who had one normal delivery and one cesarean section before, admitted to the Obstetrics and Gynecology Clinics with a history of having difficulty and pain in sexual contact for the last year. Vaginal exami-

nation was tried at normal lithotomic position, but after an unsuccessful try, the examination was repeated with ultrasonographically under anesthesia and considered a bony obstruction tightening the vagina bilaterally. The patient who was considered to have an obstruction at the pelvic outlet found out at pelvic X-ray was been consulted with the Orthopedics and Traumatology Clinics. In her orthopedics examination no pathology was found. Since the pathologic appearances of bilateral ischion arms and foramen obturatorius were present on the pelvic X-ray, 3 dimensional CT scan of pelvis and complete biochemical analysis were required. A 3 dimensional CT scan reported multiple pseudo fractures on the bilateral ischion arms and related deformities, plus protrusion acetabuli and pelvic deformity caused by osteomalacia (Figure 1). The biochemical analysis confirmed the diagnosis with high serum alkaline phosphates (ALP) and low sodium and calcium levels.

Since there were only a few cases like that in literature, patient and her husband were informed about the pathology and decided to undergo an operation. Under general anesthesia and lithotomic position, vaginal examination was performed, and then the ischion arms reached by performing an oblique incision from the lateral

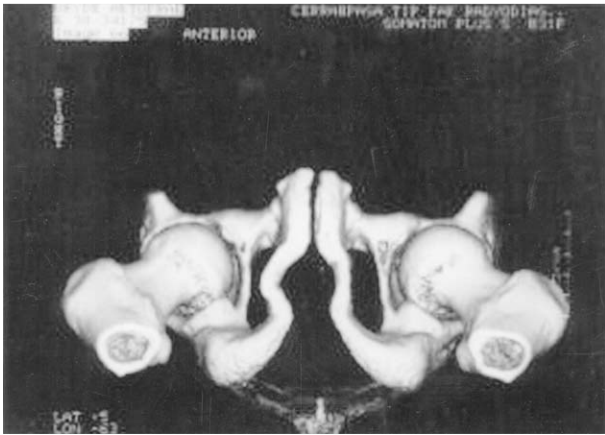


Figure 1. Preoperative 3-D CT images of pelvic outlet is seen as highly restricted with decreased bone density and pseudofracture apparant.

margin of labia major and seen that bilateral ischion arms were quite softened. Approximately 8 cm of bilateral ischion arms were resected and vaginal examination was repeated intraoperatively and established relaxed vagina (Figure 2). After placing tampons, the operation was finished. The patient was permitted to have sexual intercourse after taking out tampons and sutures. At the postoperative pelvic X-ray pelvic outlet was seen to be widened. After three months, this appearance was confirmed with 3 dimensional CT scan (Figure 3). She was discharged from hospital with the suggestions of Internal Medicine Clinics about treatment for osteomalacia. The patient was given D vitamin about one year. After one year, she became pregnant with normal coition way. A 12 week twin intrauterine gestational sac was seen with transabdominal ultrasonography. The patient was admitted to our clinics with the complaint of absence of fetal movement at sixth month of gestation. At ultrasonographical examination was a showed two babies death. After the cesarean section operations, the patient has uneventful recovery period.

Discussion

Osteomalacia related to the deficiency of vitamin D depends on many factors. The major causes are: a) Deficiency of production in the skin- (inadequate exposure to sunlight-air pollution), b) Failure in intake – (not intake an additional vitamin D to the people at risk, malabsorption, biliary atresia or obstruction, c) Increased catabolism (anti-convulsive therapy), d) Increased requirements (growing, pregnancy, poor dietary intake of calcium and phosphorus e) Increased loss of calcium (malabsorption, hepatobiliary failure, nephrotic syndrome).

The most frequent cause of all is deficiencies of production in the skin and failure of intake. In our 28 years old

female patient the main factor was established as frequent periods of pregnancy accompanied with failure of intake. In the literature such kind of deformities were mostly coincided in India. Especially in the North part of India this situation is an endemic problem. During pregnancy the rate of osteomalacia is very high as %1-10 in China and as %1-3 in India (3).

The main cause in the endemic parts of India are especially the poor dietary intake of calcium and vitamin D deficiency, high dietary intake of phytic acid and inadequate exposure to sunlight in the crowded urban life. Phytic acid is found within a kind of unleavened bread in India and prevents the absorption of calcium from intestinal lumen by forming an amorphous calcium precipitate, moreover it decreases the effect of vitamin D. This substance is the major cause of osteomalacia of Bedouin women in India, Pakistan and England.

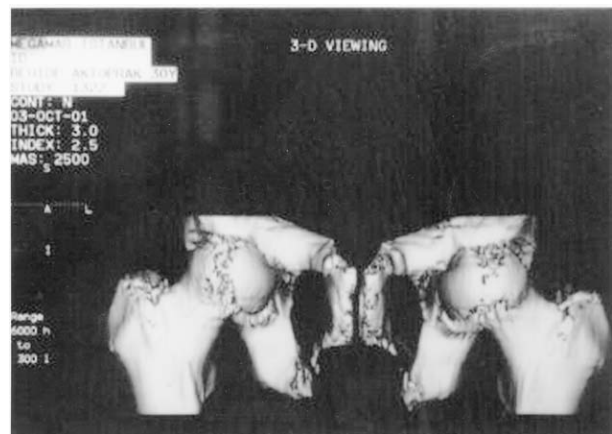


Figure 2. Intraoperative macroscopic images of soft and fragile bone both ischion arms that are excised.

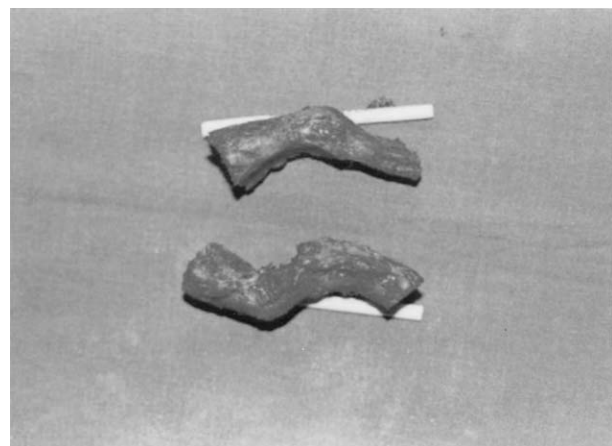


Figure 3. 3-D CT images of widened pelvic outlet after bilateral ischion arms excision.

Clinical findings of vitamin D deficiency: Pain and deformities of the bones, proximal muscle weakness, and disorder on walking, symptoms related to hypocalcaemia (paraesthesia and convulsions). Biochemical findings: According to the stage of deficiency and the importance of parathyroid reaction, calcemia (normal or low), hypophosphatemia, high serum alkaline phosphatase.

In our patient Chvostek's and Trousseau's signs were negative, but high serum Alkaline phosphatase, low sodium and calcium levels, hypochromic anemia and pseudo-fractures (Milkman) and Looser zones seen on X-rays and CT scan verified the diagnosis of osteomalacia (4,5).

In literature only a few reports about pelvic outlet obstruction related to osteomalacia were established only one case but was treated with surgical resection was found. Since the other cases could let a sexual intercourse, only the deliveries have been performed with cesarean section. Pelvic deformities of the osteomalacic type are considered rare medical curiosities, and elective cesarean section is usually indicated. There is emphasis on the fact that vaginal delivery is not granted from a pelvic point of view for

multiparous women who have delivered normally in the past.

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Geliş Tarihi: 20.02.2003

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