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CASE REPORT PRIKAZ BOLESNIKA

OSTEITIS PUBIS AND OSTEOMYELITIS PUBIS IN PREGNANCY – TWO CASE REPORTS

OSTEITIS PUBIS I OSTEOMIJELITIS PUBIS U TRUDNOĆI – PRIKAZ DVIJU BOLESNICA

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Abstract

Pubic pain frequently accompanies uneventful pregnancies and is a common symptom in pregnancy. Still, in some cases, especially when it is associated with walking difficulties, persistent and/or severe pubic pain, and inflammation that can be confirmed by laboratory parameters, it should be taken with additional caution. Differential diagnosis should include osteitis pubis, a non-bacterial, self-limited inflammation that leaves no permanent consequences, but also, more importantly, osteomyelitis of the pubic symphysis. This is a rare bacterial infection in pregnancy, important to be diagnosed in time and treated early and properly since it can leave serious long-term complications such as fistulas that require prolonged treatment and sometimes even surgery. A multidisciplinary approach is mandatory to exclude all the other potential causes of pubic pain and make a timely diagnosis of osteomyelitis. We present two patients with pubic pain during pregnancy, with two different diagnoses and treatment options, and a favorable outcome that was the result of a multidisciplinary approach.

Keywords: Pelvic pain – etiology; Osteitis – diagnosis, therapy; Osteomyelitis – diagnosis, therapy; Pregnancy complications, infectious – diagnosis, therapy; Pubic symphysis – pathology

Sažetak

Pubična bol najčešće je prisutna u urednim trudnoćama i čest je simptom u trudnoći. Ipak, katkad, a osobito ako uzrokuje tegobe pri kretanju, jaka je i/ili perzistentna te ako je povezana s upalom dokazanom laboratorijskim parametrima, trebala bi uputiti na pojačan oprez. Diferencijalna dijagnoza trebala bi uključiti osteitis pubis – nebakterijsku, samoograničavajuću upalu pubične simfize koja ne ostavlja trajne posljedice, ali i puno važnije, osteomijelitis pubis – bakterijsku infekciju pubične simfize koja se rijetko vidi u trudnoći, a zakasnjelo dijagnosticiranje te kasno i neodgovarajuće liječenje mogu ostaviti dugoročne komplikacije kao što su fistule koje nalažu dugotrajno, katkad i kirurško liječenje. Multidisciplinarni pristup obvezatan je radi isključivanja svih potencijalnih uzroka pubične boli i ranog postavljanja dijagnoze osteomijelitisa pubične simfize. Prikazujemo dvije trudnice s pubičnom boli u trudnoći, no s različitom dijagnozom i liječenjem te povoljnim ishodom koji je rezultat multidisciplinarnog pristupa.

Ključne riječi: Zdjelična bol – etiologija; Osteitis – dijagnoza, liječenje; Osteomijelitis – dijagnoza, liječenje; Infekcijske komplikacije u trudnoći – dijagnoza, liječenje; Preponska simfiza – patologija

INTRODUCTION

Pubic pain is frequently present in uneventful pregnancies. When the pain is constant and/or associated with inflammation and increased laboratory parameters like leukocytes, C-reactive protein (CRP), and erythrocyte sedimentation rate (ESR), it should be taken seriously.

Osteitis pubis is a self-limited, non-bacterial inflammation of the pubic symphysis that heals spontaneously without permanent consequences (1–3). Osteomyelitis pubis is a rare bacterial inflammation of the pubic symphysis not often seen in pregnancy (2, 4). The latter is difficult to diagnose and, if unrecognized or treated inadequately, can leave serious short- or long-term complications (2, 3, 5).

We present two patients with severe pubic pain during pregnancy, with two different diagnoses and treatment options.

PATIENT DESCRIPTIONS

Patient 1

A 38-year-old primigravida in the 32nd week of pregnancy was admitted to the obstetric department with severe pubic pain. She could not walk. The pain had lasted for a week and was progressive. Obstetric examination was normal. Ultrasonographic examination of the fetus was also normal. On cardiotocography no contractions were detected. Inflammatory laboratory parameters were not increased at admission and during hospital stay. Urinary infection was excluded.

The pain was managed by analgesics and the patient was released in good condition after three days. After two weeks, the pain had disappeared. The patient was admitted again in the 40th week of pregnancy and gave birth to a female newborn weighing 3,420 g, 50 cm in length, and Apgar score 10/10. At the follow-up visit after 30 days, there was no presence of pain in the pubic symphysis.

Patient 2

A 29-year-old woman, gravida 3, in the 19th week of pregnancy, was admitted to the obstetric department with strong pelvic pain lasting for three days. She had a history of urinary tract infection earlier in the pregnancy. Urinary tract infection was excluded but inflammatory parameters were elevated (leukocytes 11.8x 10^9/L and CRP 32.6 mg/L). Physical examination revealed pain on palpation of the pubic symphysis. Obstetric findings, transvaginal ultrasonographic cervical assessment, and ultrasonographic examination of the fetus were normal. Other causes of pelvic pain were excluded by an abdominal surgeon and a gastroenterologist. Magnetic resonance imaging (MRI) of the pelvis revealed an inflammation of the pubic symphysis with

UVOD

Pubična bol često je prisutna u urednim trudnoćama. Ako je bol stalno prisutna ili povezana s upalom i povišenim vrijednostima laboratorijskih parametara kao što su broj leukocita, C-reaktivni protein (CRP) i brzina sedimentacije eritrocita (SE), potreban je ozbiljan pristup.

Osteitis pubis samoograničavajuća je, nebakterijska upala pubične simfize koja spontano cijeli bez trajnih posljedica (1 – 3). Osteomijelitis pubis, pak, rijetka je bakterijska upala pubične simfize koja se ne susreće često u trudnoći (2, 4). Teško ju je dijagnosticirati i, ako ostane neprepoznata ili bude neodgovarajuće liječena, može ostaviti teške kratkoročne ili dugoročne posljedice (2, 3, 5).

Donosimo prikaz dviju trudnica s jakom pubičnom boli različitih uzroka, koje su bile i različito liječene.

PRIKAZ BOLESNICA

BOLESNICA br. 1

Prvorotkinja u dobi od 38 godina primljena je u 32. tjednu trudnoće u Kliniku za ženske bolesti i porodništvo zbog jake pubične boli. Bolesnica nije mogla hodati. Bol je trajala tjedan dana i pojačavala se. Nalaz opstetričkog pregleda bio je uredan. Ultrazvučni pregled fetusa također je bio normalan. Kardiotokografijom nisu otkrivene kontrakcije. Upalni laboratorijski parametri u vrijeme prijma i tijekom boravka u bolnici nisu bili povišeni. Urinarna infekcija bila je isključena.

Bol je liječena primjenom analgetika i bolesnica je nakon tri dana otpuštena u dobru stanju. Dva tjedna poslije bol je nestala. Bolesnica je ponovo primljena u 40. tjednu trudnoće kada je rodila djevojčicu težine 3420 g, duljine 50 cm i Apgarina indeksa 10/10. Na kontrolnom pregledu nakon 30 dana nije bilo boli u pubičnoj simfizi.

BOLESNICA br. 2

Trećerotkinja u dobi od 29 godina primljena je u 19. tjednu trudnoće u Kliniku za porodništvo zbog jake boli u zdjelici koja je trajala već tri dana. U anamnezi je imala infekciju mokraćnih putova prije u trudnoći. Infekcija mokraćnih putova bila je isključena, ali su upalni parametri bili povišeni (leukociti 11,8 × 10^9/L i CRP 32,6 mg/L). Na fizikalnom pregledu bila je prisutna bol na palpaciju pubične simfize. Opstetrički nalaz i nalazi pregleda grla maternice transvaginalnim ultrazvukom i ultrazvučnog pregleda fetusa bili su uredni. Ostali uzroci boli u zdjelici isključeni su na temelju nalaza abdominalnog kirurga i gastroenterologa. Na snimkama zdjelice magnetskom rezonancijom (MR) pokazali su se upala pubične simfize s edemom koštane srži i okolnih mekih tkiva te tekućina u simfizi (slika 1.). Drugog

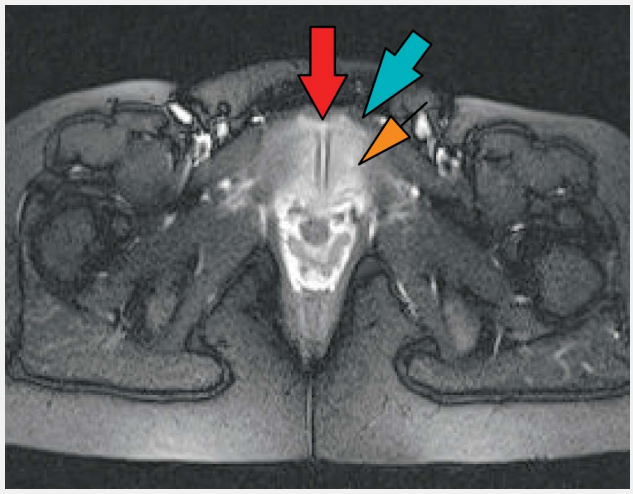

FIGURE 1. Axial fat-suppressed proton density-weighted MR image shows inflammatory changes of the pubic symphysis – parasymphyseal bone marrow edema (yellow arrow) with symphyseal fluid (red arrow) and peripubic soft tissue edema (blue arrow).

SLIKA 1. Aksijalna snimka magnetskom rezonancijom (MR) na temelju gustoće protona s potiskivanjem signala iz masnog tkiva pokazuje upalne promjene pubične simfize – edem koštane srži parasimfizealno (žuta strjelica) sa simfizealnom tekućinom (crvena strjelica) i edemom peripubičnoga mekog tkiva (plava strjelica)

bone marrow edema, surrounding soft tissue edema, and fluid within the symphysis (Figure 1). On the second day after admission antibiotic treatment with Cefazolin 3x1g intravenously was started, but despite that the CRP level rose to 157.8 mg/L. Subsequently, Cefazolin therapy was stopped after two days, and Clindamycin 3x600 mg and Garamycin 1x240mg were administered intravenously for seven days. Non-steroidal anti-inflammatory drugs (NSAIDs) were also administered. Regression of symptoms occurred with a decrease of the inflammatory parameters. Physical therapy started and the patient was released on the 14th hospital day. Serology for Chlamydia was positive. After one week the patient was free of pain. The rest of the pregnancy proceeded without any complications. The patient gave birth to a female newborn weighing 2880 g, 48cm in length, Apgar score 10/10, in the 40th week of pregnancy.

DISCUSSION

Osteomyelitis in pregnancy is a very rare condition (2). The presenting symptoms of osteitis pubis and osteomyelitis of the pubic symphysis are very similar and definitive diagnosis is not simple. As mild pubic pain is a common condition in pregnancy, osteomyelitis of the pubic symphysis may be diagnosed late and treatment delayed (3). The pathogenesis of osteitis pubis is uncertain. Possible etiologies include infection, mechanical trauma to the symphysis, local vascular damage of reflex sympathetic history (6). Given the low cost, wide availability, and ease of administration, the application of ice, NSAIDs, and physical rehabilitation are suggested as the first line of therapy for both acute and chronic cases of osteitis pubis (7–9). Osteitis pubis leaves no permanent damage. On the other hand, the consequences of untreated or late-treated osteomyelitis can be serious with short- and long-term complications, which can be local or systemic. The most serious

dana nakon prijma započelo je antibiotsko liječenje intravenskom primjenom cefazolina u dozi od 3 × 1 g na dan, no unatoč tomu vrijednost CRP-a povisila se na 157,8 mg/L. Dva dana poslije ukinuta je terapija cefazolinom i započela je intravenska primjena klindamicina od 3 × 600 mg na dan te gentamicina (Garamycin*) u dozi od 1 × 240 mg na dan tijekom sedam dana. Primijenjeni su i nesteroidni protuupalni lijekovi (NSAIL-i). Nastupilo je ublaženje simptoma uz pad vrijednosti upalnih parametara. Uvedena je i fizikalna terapija te je bolesnica otpuštena nakon 14 dana hospitalizacije. Serološki nalaz na klamidiju bio je pozitivan. Tjedan dana poslije bolesnica više nije imala boli. Ostatak trudnoće protekao je bez ikakvih komplikacija. Bolesnica je rodila djevojčicu težine 2880 g, duljine 48 cm i Apgarina indeksa 10/10 u 40. tjednu trudnoće.

RASPRAVA

Osteomijelitis u trudnoći vrlo je rijetko stanje (2). Simptomi osteitisa pubis vrlo su slični simptomima osteomijelitisa pubične simfize, stoga konačnu dijagnozu nije jednostavno postaviti. U trudnoći je često prisutna blaga pubična bol pa osteomijelitis pubične simfize može biti zakasnjelo dijagnosticiran i kasno liječen (3). Patogeneza osteitisa pubis nije točno utvrđena. Mogući uzroci uključuju infekciju, mehaničku traumu simfize, lokalne vaskularne anomalije i refleksnu simpatičku distrofiju (6). Kao prva linija liječenja i kod akutnih i kod kroničnih slučajeva osteitisa pubis preporučuju se led, NSAIL-i i fizikalna rehabilitacija s obzirom na njihovu nisku cijenu, široku dostupnost i jednostavnost primjene (7 – 9). Osteitis pubis ne ostavlja trajne posljedice. S druge strane, neliječeni ili kasno liječeni osteomijelitis može imati teške posljedice, s kratkoročnim i dugoročnim lokalnim ili sistemskim komplikacijama. Najteže komplikacije poput fistula nalažu dugotrajno liječenje, a katkad i kirurški zahvat

complications, such as fistulas, require prolonged treatment and sometimes even surgery (5). Pregnancy is an especially sensitive period in a woman's life and affects the psychosocial aspects of wellbeing. Any life- or health-threatening condition can affect future decisions regarding pregnancy.

The favorable outcome in our case was the result of a multidisciplinary approach. Early diagnosis is possible only if all the other conditions that may mimic osteomyelitis are excluded before obvious signs of infection occur.

CONCLUSION

In cases of pelvic and groin pain in pregnancy, especially when associated with walking difficulties and severe pubic pain, differential diagnosis should include osteomyelitis of the pubic symphysis. A multidisciplinary approach is mandatory to exclude all the other causes of pubic pain. In the diagnostic process and consequent treatment, different clinicians should be involved, such as obstetricians, urologists, gastroenterologists, abdominal surgeons, physiatrists, and sometimes even anesthesiologists for pain relief.

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(5). Trudnoća je osobito osjetljivo razdoblje u životu žene i utječe na psihosocijalne aspekte kvalitete njezina života. Svako zdravstveno stanje koje ugrožava zdravlje ili život žene može utjecati na njezinu odluku o budućim trudnoćama.

Povoljan ishod u prikazu bolesnice koji smo opisali bio je rezultat multidisciplinarnog pristupa. Rano postavljanje dijagnoze moguće je samo ako se isključe sva druga stanja koja oponašaju osteomijelitis prije nego što se pojave vidljivi znakovi infekcije.

ZAKLJUČAK

Kod boli u zdjelici i preponama tijekom trudnoće, osobito kad je povezana s tegobama pri hodanju i jakom pubičnom boli, diferencijalna dijagnoza mora uključiti osteomijelitis pubične simfize. Obvezatan je multidisciplinarni pristup da bi se isključili svi drugi uzroci pubične boli. U dijagnostičkom postupku i liječenju koje zatim slijedi moraju sudjelovati razni klinički specijalisti: od opstetričara, urologa i gastroenterologa do abdominalnog kirurga, fizijatra, a katkad i anesteziologa radi uklanjanja boli.

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