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DISJUNCTION OF THE SYMPHYSIS PUBIS AFTER VAGINAL DELIVERY (INDIVIDUAL CASE STUDY)

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ABSTRACT

Pubic symphysis disjunction is described as enlargement of the pubic joint by more than 10 mm and is considered as an uncommon complication of vaginal delivery or pregnancy (1 in 300 to 1 in 30,000 pregnancies), for which no standard treatment has been defined. We present the case of a patient with severe pelvic pain complicated by impotence of the left lower limb that occurred 3 days after a dystocic vaginal delivery. The diagnosis of symphysis disjunction was confirmed by a radiology of the pelvis. The therapeutic management consisted of exclusive medical treatment. The evolution was favorable. Through this case, we will emphasize the characteristics of this pathology, especially the diagnosis, which will allow the practitioner to understand its interest, as well as the interest of an early and adapted management.

KEYWORDS: Symphysial disjunction, dystocic delivery, pubic pain.

INTRODUCTION

The gravid state leads to several changes including those of the pelvic geometry, in order to prepare for delivery.[1] Pubic disjunction syndrome is a rare pathology often undiagnosed and poorly managed. Its risk factors are not well known and its incidence is variable, between 1/300 and 1/30,000 pregnancies.[2,3] Its diagnosis is confirmed by a frontal radiograph of the pelvis.[5,6] The main concern with this condition is to predict the risk of recurrence and the mode of delivery for subsequent pregnancies. We report the case of a patient who presented with symphyseal disjunction syndrome following a dystocic vaginal delivery.

OBSERVATION

A 25-year-old primipare patient, with an uncontrolled pregnancy that was uneventful, with no evidence of pelvic pain, and was delivered at term. The delivery took place in a hospital structure, it was dystocic with recourse to an instrumental extraction (suction cup), and gave birth to a male newborn with a weight of 4400g. The patient presented 12 hours after her delivery a pelvic pain, treated by the administration of usual analgesics. Due to the non-sedation of the pelvic pain with analgesics and the development of functional impotence of the lower limb, the patient was reevaluated at day 3 of her delivery. On admission, the patient was unable to walk, with her left lower limb in abduction and external rotation. The clinical examination indicated diffuse pelvic sensitivity, more pronounced to pre-pubic palpation,as well as a painful limitation of abduction of the left lower limb. The complementary examinations were guided by the clinical data, the X-ray of the pelvis revealed a pubic disjunction. Abdominal and pelvic CT scan was performed to rule out other causes of pelvic tenderness, or associated fracture. It showed a 3 cm symphysial disjunction with infiltration of the soft tissues in view, with no detectable collection or fracture. The sacroiliac and coxofemoral joints were normal in appearance (Figure 1,2). The therapeutic approach consisted of unloading, preventive anti-coagulation, and analgesic treatment with paracetamol and NSAIDs. The evolution was favorable with disappearance of the pain and a recovery of the motor deficit 6 weeks after.

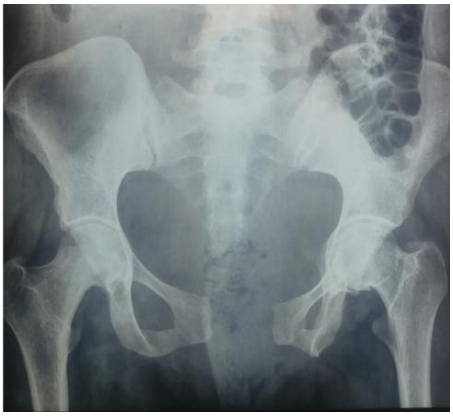

Figure 1: Pubic disjunction on the radiography of the basin.

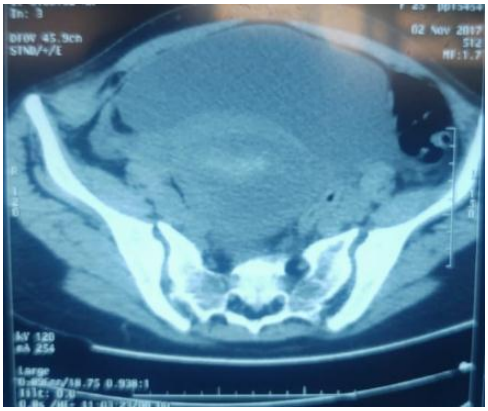

Figure 2: Pubic disjunction on CT scan of the pelvis.

DISCUSSION

Pregnancy is accompanied by several physiological changes involving various organs, particularly the musculoskeletal system and primarily the pelvic geometry. These changes are characterized by micro-mobilities of the sacroiliac joints, the pubic symphysis and a general laxity of the connective tissues of hormonal origin: estrogens and relaxine act on the ligaments, muscles and entheses of the pelvic region.[1]

The pubic disjunction syndrome was first described by Snelling in 1870.[7] It is a relatively rare pathology whose incidence in the peripartum period is estimated between 1/300 and 1/30 000 in the literature.[8,9] It is a pathology that often occurs at the end of pregnancy or in the post partum period, cases of early onset have been reported at 20 and 31 weeks of pregnancy.[10,11]

The etiologies remain poorly defined, but certain risk factors may favor its occurrence, notably macrosomia and fetal extraction maneuvers; as was the case of our patient; joint pathologies and trauma of the pubic joint.[10,12]

The typical symptomatology seems to involve pain of the pubic symphysis with inguinal radiation associated with pain of the sacroiliac joint.[13] However, the clinical picture is not always as clear-cut and may be presented in various forms: pubic symphysis pain of varying degree (in 22% of parturients), and which is excruciating in only 5-8% of parturients.[14,15] However, the frequent occurrence of pelvic pain during pregnancy and/or in the postpartum period, most often secondary to causes related to the gravido-puperal state.[20] complicates the diagnosis, exposing the practitioner to the possibility of missing this pathology and thus leading to a delay in its management and a greater morbidity. Therefore, the occurrence of pubic pain, especially in the presence of risk factors, a disjunction of the pubic symphysis must be sought to ensure timely management to limit the sequelae.[16]

Clinical examination of the pubic symphysis in search for an exquisite pain on palpation, whether or not associated with symphysis edema, may guide the diagnosis.[16]

The radiograph of the pelvis from the front is the first-line radiological examination. It allows assessment of the inter-symphysis space, which beyond 10 mm confirms the diagnosis,[11] it was estimated at 30 mm in our patient.

It is important to note that there is no correlation between the degree of separation observed and the severity of symptoms.[12] However, the exploration of this space can be performed by ultrasound in patients during pregnancy, to avoid fetal irradiation, but it is not yet validated in this context.[17]

Therapeutic management is essentially medical, based on rest, analgesic treatment, preventive anticoagulation and rehabilitation. Epidural analgesia is reserved for cases occurring during early term pregnancy.[11] In the post-partum period, local infiltration of anesthetic and/or corticoid at the level of the pubic symphysis appears to be effective in forms that are resistant to the usual analgesic treatments.[18] In cases of significant diastasis, pelvic bandage is recommended,[10,19] and in cases where the diastasis is greater than 4 cm, surgical treatment may be recommended,[19] The management of our patient consisted on an off-loading and exclusive medical treatment, leading to a clear improvement with recovery of the deficit after 6 weeks.

For subsequent pregnancies, the mode of delivery is a major issue for the obstetrician; the vaginal route can be allowed as a first intention, while making the woman aware of the risk of recurrence,[21]

CONCLUSION

The increase in mechanical stresses and physiological changes, particularly of the joints and ligaments during the peri-partum period, frequently generate pelvic pain, which is usually minimal and benign, but makes it difficult to diagnose symphysis pubic disjunction, given its rarity and its symptomatology, which is not always obvious.

Conflit of interest
I declare that I have no conflict of interest.

RÉFÉRENCES

1. Timsit M.A. Grossesse et douleurs rhumatologiques lombaires basses et de la ceinture pelvienne *Gynecol Obstet Fertil*, 2004; 32: 420-426.
2. Kubitz R.L., Goodlin R.C. Symptomatic separation of the pubic symphysis South Med J., 1986; 79: 578-580. [cross-ref]
3. Williams J.W., Eastman N.J., Hellman L.M. Coincidental complications of pregnancy Obstetrics New York: Appleton-Century-Crofts, 1966; 820-821.
4. Hansen A., Jensen D.V., Wormlev M., Minck H., Johansen S., Larsen E.C., et al. Symptom-giving pelvic girdle relaxation in pregnancy. II: symptoms and clinical signs *Acta Obstet Gynecol Scand*, 1999; 78: 111-115 [cross-ref]
5. Scicluna J.K., Alderson J.D., Webster V.J., Whiting P. Epidural analgesia for acute symphysis pubisdysfunction in the second trimester Int J Obstet Anesth, 2004; 13: 50-52 [cross-ref]
6. Pedrazzini A., Bisaschi R., Borzoni R., Simonini D., Guardoli A. Post partum diastasis of the pubic symphysis: a case report Acta Biomed, 2005; 76: 49-52.
7. Snow R.E., Neubert A.G. Peripartum pubic symphysis separation: a case series and review of the literature Obstet Gynecol Surv, 1997; 52: 438-443. [cross-ref]
8. Hansen A, Jensen DV, Larsen EC, Wilken-Jensen C, kaae BE, Frolich S, et al. Postpartum pelvic pain-the « pelvic joint syndrome": a followup study with special reference to diagnostic methods. Acta Obstet Gynecol Scand, 2005; 84: 170–6.
9. Kubitz RL, Goodlin MD. Symptomatic separation of the pubic symphysis. South Med J., 1986May; 79(5): 578–80. [PubMed] [Google Scholar]
10. Williams JW, Eastman NJ, Hellman LM. Coincidental complications of pregnancy. In: Lichtman Marshall A, editor. Williams obstetrics. NewYork: Appleton-Century-Crofts, 1966; 820–1. [Google Scholar]
11. Culligan P, Hill S, Heit M. Rupture of the symphysis pubis during vaginal delivery followed by two subsequent uneventful pregnancies. ObstetGynecol, 2002 Nov; 100(5 Pt 2): 1114–7. [PubMed] [Google Scholar]
12. Scicluna JD, Alderson JD, Webster VJ, Whiting P. Epidural analgesiafor acute symphysis pubis dysfunction in the second trimester. Int J Obstet Anesth, 2004 Jan; 13(1): 50–2. [PubMed] [Google Scholar]
13. Snow RE, Neubert AG. Peripartum pubic symphysis separation during pregnancy: a case report. Obstet Gynecol Surv, 1997 Jul; 52(7): 438–43. [PubMed] [Google Scholar]
14. Scicluna JD, Alderson JD, Webster VJ, Whiting P. Epidural analgesiafor acute symphysis pubis dysfunction in the second trimester. Int J Obstet Anesth, 2004 Jan; 13(1): 50–2. [PubMed] [Google Scholar]
15. Albert H, Godskesen M, Westergaard J. 2001 Prognosis in four syndromesof pregnancy-related pelvic pain. Acta Obstet Gynecol Scand, 2001 Jun; 80(6): 505–10. [PubMed] [Google Scholar]
16. Culligan P, Hill S, Heit M. Rupture of the symphysis pubis during vaginal delivery followed by two subsequent uneventful pregnancies. ObstetGynecol, 2002 Nov; 100(5 Pt 2): 1114–7. [PubMed] [Google Scholar]
17. Luger EJ, Arbel R, Dekel S. Traumatic separation of thrsymphysis pubis during pregnancy: a case report. J Trauma, 1995 Feb; 38(2): 255–6. [PubMed] [Google Scholar]
18. Scriven MW, Jones DA, McKnight L. The importance of pubic pain following childbirth: a clinical and ultrasonographic study of diastasisof the pubic symphysis. J R Soc Med, 1995 Jan; 88(1): 28–30. [ArticlePMCgratuit] [PubMed] [Google Scholar]
19. Waldam SD. Ostéitepubienne. In: Waldam SD, Steven D, editors. Atlas des syndromes douloureux fréquents - Paris, Maloine, 2003; 217–9. [Google Scholar]
20. Kharrazi FD, Rodgers WB, Kennedy JG, Lhowe DW. Parturition-induced pelvic. dislocation: a report of four cases. J Orthop Trauma, 1997 Oct; 11(7): 543. [PubMed] [Google Scholar]
21. Pelvic pain by acute symphysis pubis separation after vaginal delivery M. Bonnin a , F. Bolandard a,*, B. Storme a , F. Sibaud a , B. Rabishong 15 mai, 2006.
22. Antécédent de disjonction pubienne et modalités d'accouchement - 21/01/11Doi : 10.1016/j.jgyn.2010.07.004 C. Gillaux, C. Eboue, M. Herlicoviez, M. Dreyfus Service de gynécologie-obstétrique et de médecine de la reproduction, CHU de Caen, avenue Côte-de-Nacre, 14033 Caen cedex 9, France.