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Obstructive Pyelonephritis Revealed During Unknown Pregnancy: Report of a Case and Literature Review.

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ABSTRACT

The extrinsic compression by the gravid uterus is the most common cause of hydronephrosis in pregnancy. This is often tolerated seen its regressive nature after childbirth. However, this physiological factor could unmask a preexisting urinary deasise.We report, the clinical case of a patient aged 35, pregnant at 9 weeks, who was admitted to the emergency of renal colic.She had medical treatment without improvement. The evolution was marked by the clinical and biological improvement. After delivery, she had a CT scan that showed no abnormality, we also report a literature review on problems of diagnosis and management of urolithiasis in pregnancy.

Introduction

The incidence of urinary lithiasis during pregnancy, identical to that observed in non-pregnant women. Most often hydronephrosis is well tolerated due to its regressive character after childbirth. The treatment of urinary lithiasis in pregnant women must be conservative medical, but if more invasive treatments are used.

Observation:

MM. F.R aged 20 year old, 9 weeks of amenorrhea, under oral contraception, nulliparous , without notion of delayed menstruation. She had presented 24 hours before a hyperalgic nephritic colic, without a notion of fever evolving for 24 hours. She was examined in another hospital, an ultrasound high-frequency with mode B , probe complement by Uro MRI have demonstrated a moderate hydronephrosis in right side without lithiasis, and foetal pregnancy , the biological check-up showed no shortcomings kidney.

ECBU was sterile.

She had received an injection of corticosteroid combined with an analgesic and an antispasmodic without any improvement. Indication of of jj probe on the right side under sedation, a fetal maturation ultrasound showed no anomaly.

DISCUSSION :

The incidence of urinary lithiasis during pregnancy varies from 1/200 to 1/2500 [1-2], identical to that observed in non-pregnant women [3,4].

Hydronephrosis is a frequent physiological phenomenon, involving 90% of pregnant women, often right due to the dextro-rotation of the pregnant uterus, the role of progesterone was also demonstrated especially in early pregnancy. Several physiological changes favor the formation of urinary calculi during pregnancy: increased glomerular filtration as well as clearance of creatine, uric acid, urea and sodium and calcium filtration [4, 5].

Hypercalciuria by decreased parathyroid hormone production and increased secretion of 1, 25-dihydrocholecalciferol by placenta, this promotes gastrointestinal absorption of calcium and bone calcium mobilization.

The incidence of urinary lithiasis is identical to that of non-pregnant women and is explained by an increase in the antagonists of complement formation (urinary excretion of citrate, magnesium or glycoproteins) [4, 5].

Clinically, urinary calculi show up during pregnancy 95% by hematuria or by lumbar pain 85% [6,7]. Clinical diagnosis often difficult the risk of prematurity is more important in pregnant women with a urinary calculus in a study conducted in Washington State [8].

Due to the fetal risk of irradiation abdomino-pelvic ultrasound remains a benchmark with good sensitivity, and specificity evaluated respectively 34% in the study of Stothers and Lee [7], in order to improve the sensitivity of the abdominal- Ultrasound, the use of endovaginal US [9], or better the use of the calculation of the index of renal vascular resistance makes it possible to differentiate the dilation on obstacle, of the functional dilation.

Magnetic resonance imaging (MRI), not irradiation, but limit indication due to poor accessibility and cost elevates, indicate if ultrasound diagnostic doubt. It allows appreciating the indirect signs of obstruction [10].

Abdomen without preparation (ASP) or intravenous urography (IVU), a measure of benefit / risk, poses a problem of interpretations that are too difficult for pregnant women, with protocols to reduce irradiation [4].

The scanner is too irradiating and is contraindicated in pregnant women because of the risk of fetal malformation.

Isotopic scintigraphy is less radiating, but less accessible [4].

The therapeutic management of the lithiasis disease during pregnancy must take into consideration the risks on the fetus, well know the analgesic and the antibiotic to indicate in the pregnant woman, all the anti-

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inflammatory are contraindicated, encourage the conservative treatment [4].

In the first trimester, general anesthesia should be avoided as much as possible, and local anesthesia should be avoided as soon as possible, because of the fetal risk [11].

Urinary drainage is an invasive treatment: an ultrasound probe, a probe of percutaneous nephrostomy, but most often JJ, the trigonal deformation by the fetal head explains the failure of the ascent of jj, often described in the literature [12, 13]. But with the advantage of an implantation under local anesthesia under ultrasound control.

FIGURES.

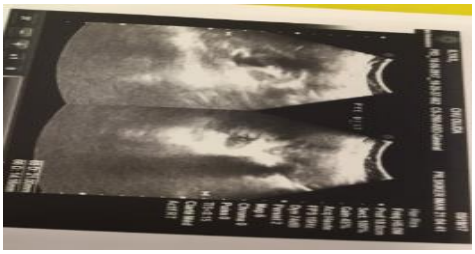

Figure 1: US Hydronephrosis in right cavities

Figure 2: Uro MRI showing right hydronephrosis secondary to compression by pregnancy fetal head

Conclusion

The diagnosis of urinary lithiasis in pregnant women is based on clinical pairing and ultrasound. Conservative treatment should take into account the contraindications of medical treatment related to pregnancy. The invasive treatment indicated in case of complication. Open surgical treatment has no place at present, and the etiological assessment would be completed in postpartum.

References

1-Lewis D.F., Robichaux A.G., Jaeckle R.K., Marcum N.G., Stedman C.M. Urolithiasis in pregnancy. Diagnosis, management and pregnancy outcome. J Reprod Med 2003;48:28-32.

2-Butler E., Cox S., Eberts E., Cunningham G. Symptomatic nephrolithiasis complicating pregnancy. ObstetGynecol 2000;96:753-756.

3-Hendricks S.K., Ross S.O., Krieger J.N. An algorythm for diagnosis and therapy of management and complications of urolithiasis during pregnancy. SurgGynecol Obstet 1991; 172: z49-54.

4-Biyani C., Joyce A. Urolithiasis in pregnancy. I: pathophysiology, fetal considerations and diagnosis. Br UrolInt 2002;89:811-818.

5-McAlear S.J., Loughlin K.R. Nephrolithiasis and pregnancy. CurrOpinUrol 2004;14:123-127.

6-Drago J.R., Rohner T.J., Chez R.A. Management of urinary calculi in pregnancy. Urology 1982;20:578-581.

7-Stothers L., Lee L.M. Renal colic in pregnancy. J Urol 1992;148:1383-1387.

8-Swartz M.A., Lydon-Rochelle M.T., Simon D., Wright J.L., Porter M.P. Admission for nephrolithiasis and risk of adverse birth outcomes. ObstetGynecol 2007;109:1099-1104.

9-Laing F.C., Benson C.B., DiSalvo D.N., Brown D.L., Frates M.C., Loughlin K.R. Distal ureteral calculi: detection with vaginal US. Radiology 1994;192:545-548.

10-Spencer J.A., Chahal R., Kelly A., Taylor K., Eardley I., Lloyd S.N. Evaluation of painful hydronephrosis in pregnancy: magnetic resonance urographic patterns in physiological dilatation versus calculous obstruction. J Urol 2004;171:256-260.

11-Pedersen H., Finster M. Anaesthetic risk in the pregnant surgical patient.Anaesthesiology 1979;51:439-451.

12-Cormier C.M., Canzoneri B.J., Lewis D.F., Briery C., Knoepp L., Mailhes J.B. Urolithiasis in pregnancy: current diagnosis, treatment, and pregnancy complications. ObstetGynecolSurv 2006;61:733-741.

13-Biyani C.S., Joyce A.D. Urolithiasis in pregnancy. II: management. BJU Int 2002;89:819-823.

14-Saussine C, Lechevallier E, Traxer O. PCNL: technique, results andcomplications.ProgUrol2008;18:886–90.

15-Rittenberg M.H., Bagley D.H. Ureteroscopic diagnosis and treatment of urinary calculi during pregnancy. Urology 1988;32:427-428.

16-Shah A., Chandak P., Tiptaft R., Glass J., Dasgupta P. Percutaneous nephrolithotomy in early pregnancy. Int J ClinPract 2004;58:809-810.

17-Holman E., Toth C., Khan M.A. Percutaneous nephrolithotomy in late pregnancy. J Endourol 1992;6:421-424.