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Pregnancy, Fibroids-The Two Entities Together

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Pregnancy with fibroids, and fibroids with pregnancy, apparently are similar terms but need to be differentiated. The former term should imply detection of fibroids for the first time in pregnancy (whether by diagnostic modalities like USG, or palpation, or at caesarean section, while the latter term should imply that fibroids were diagnosed prior to pregnancy. This is important because both the terms have their own implications on the reproductive performance of a woman and in either case their exact prevalence/incidence is not exactly known.

(To the best of our knowledge we are first to suggest this differentiation of the two terms but as of now the two terms are used interchangeably).

Given this, and prior to the era of USG the average incidence of pregnancy in association with fibroids was considered less than 1%. Later, consequent to technological advances and routine use of USG, subsequent studies have reported an incidence of 0.09% to 3.9% [1].

Baird *et al* reported the overall prevalence rates of 10 to 20% [2] while other authors have reported fibroids in pregnancy ranging from 0.1 - 10.7% of all pregnancies [3-5].

A pilot study done in Chicago reported the overall prevalence of 14.9% among asymptomatic young nulliparous women between 18 - 30 years [6].

Besides an apparent increase in the incidence of pregnancy with fibroids due to improved diagnostic modalities, in recent times, there is possibly a true increase in the prevalence of fibroids/fibroids with pregnancy, attributed to the changes in women's lifestyle, including dietary habits, increasing obesity, alcohol, and delayed childbearing [7,8].

Earlier etiological factors included increasing age, race, lower parity and ethnic factors [9-11].

Another etiological factor that recent evidence suggests is infection/inflammation in the uterus which could lead to myometrial injury through ischemia/irritation and act as a risk factor for fibroids [12].

The impact of each entity, fibroids and pregnancy, on each other is yet not fully understood, nor whether the disease has different variants. Multiple fibroids may be a different variant versus a single fibroid. Also the impact of single/multiple fibroids may differ, as for instance, multiple fibroids may further increase the miscarriage rate versus a single fibroid [13,14].

The location of fibroids is significant for instance subserous fibroids are known to have the least impact on pregnancy and its outcome [15].

Fibroids with pregnancy increase the risk of complications such as abortion, red degeneration, increased rate of caesarean delivery, preterm labor, malpresentation, post-partum hemorrhage, low Apgar score, and fetal limb abnormalities. Complications occur in approximately 10 - 40% of pregnancies in the presence of fibroids [16,17].

The management of fibroids in pregnancy is generally conservative though in specific circumstances surgical intervention/myomectomy during pregnancy and during caesarean section has been done. Currently large randomized controlled studies are lacking for establishing the safety of myomectomy during pregnancy and caesarean section [18-20].

Another recent management modality like uterine artery embolization is too limited in availability and too expensive, to be of much significance in managing postpartum hemorrhage on a broader scale, and is also not recommended in women who desire future fertility.

Conclusion

Fibroids have remained enigmatic, their prevalence, origin, behavior and impact in pregnancy inconsistent; their mechanism of causing adverse obstetric outcomes, not yet well understood, nor when diagnosed preconceptually, do we know how fibroids exactly impact fertility. There might be different mechanisms, clinical phenotypes, genetic predisposition, and yet unidentified risk factors, which need larger well controlled studies to elucidate and understand the etiopathogenesis of fibroids/fibroids with pregnancy.

Bibliography

1. Davis JL., *et al*. "Uterine leiomyomas in pregnancy: a prospective study". *Obstetrics and Gynaecology* 75.1 (1990): 41-44.

2. Baird DD., *et al*. "High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence". *American Journal of Obstetrics and Gynecology* 188.1 (2003): 100-107.

3. Coronado G., *et al*. "Complications in Pregnancy, Labor, and Delivery with Uterine Leiomyomas: a Population-Based Study". *Obstetrics and Gynecology* 95.5 (2000): 764-769.

4. Qidwai G., *et al*. "Obstetric Outcomes in Women with Sonographically Identified Uterine Leiomyoma". *Obstetrics and Gynecology* 107 (2006): 376-382.

5. Laughlin S., *et al*. "Prevalence of Uterine Leiomyomas in the First Trimester of Pregnancy: An Ultrasound-Screening Study". *Obstetrics and Gynecology* 113 (2009): 630-635.

6. Marsh EE., *et al*. "Racial differences in fibroid prevalence and ultrasound findings in asymptomatic young women (ages 18-30 years old)". *Fertility and Sterility* 99.7 (2013): 1951-1957.

7. Kjerulff KH., *et al*. "Uterine leiomyomas Racial differences in severity, symptoms and age at diagnosis". *Journal of Reproductive Medicine* 41.7 (1996): 483-490.

8. Chiaffarino F., *et al*. "Diet and uterine myomas". *Obstetrics and Gynecology* 94.3 (1999): 395-398.

9. Wise LA., *et al*. "Influence of body size and body fat distribution on risk of uterine leiomyomata in U.S. black women". *Epidemiology* 16.3 (2005): 346-354.

10. Chen C., *et al*. "Risk factors for uterine fibroids among women undergoing tubal sterilization". *American Journal of Epidemiology* 153.1 (2001): 20-26.

11. Wise L., *et al*. "Age-specific incidence rates for self-reported uterine leiomyomata in the Black Women's Health Study". *Obstetrics and Gynecology* 105.3 (2005): 563-568.

12. Faerstein E., *et al*. "Risk factors for uterine leiomyoma: a practice based case-control study. II. Atherogenic risk factors and potential sources of uterine irritation". *American Journal of Epidemiology* 153.1 (2001): 11-19.

13. Olive D and Pritts E. "Fibroids and Reproduction". *Seminars in Reproductive Medicine* 28.3 (2010): 218-227.

14. Lee H., *et al*. "Contemporary management of Fibroids in Pregnancy". *Reviews in Obstetrics and Gynecology* 3.1 (2010): 20-38.

15. Pritts E., *et al*. "Fibroids and infertility: an updated systematic review of the evidence". *Fertility and Sterility* 91.4 (2009): 1215-1223.

16. Ouyang DW., *et al*. "Obstetric complications of fibroids". *Obstetrics and Gynecology Clinics of North America* 33.1 (2006): 153-169.

17. Exacoustòs C and Rosati P. "Ultrasound Diagnosis of Uterine Myomas and Complications in Pregnancy". *Obstetrics and Gynecology* 82.1 (1993): 97-101.

18. Ehigiegba AE., *et al*. "Myomectomy during cesarean section". *International Journal of Gynecology and Obstetrics* 75.1 (2001): 21-25.

19. Buttram V C Jr and Reiter RC. "Uterine leiomyomata: etiology, symptomatology, and management". *Fertility and Sterility* 36.4 (1981): 433-445.

20. Hasan F., *et al*. "Uterine leiomyomata in pregnancy". *International Journal of Gynecology and Obstetrics* 34.1 (1991): 45-48.

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