



# VCU

Virginia Commonwealth University  
VCU Scholars Compass

---

Graduate Medical Education (GME) Resident  
and Fellow Research Day Posters

VCU Health

2020

## Ectopic Pregnancy in a Woman with T9 AIS A Paraplegia Secondary to High-Grade Spinal Cord Pilocytic Astrocytoma

Elisabeth K. Acker  
*Virginia Commonwealth University*

Follow this and additional works at: [https://scholarscompass.vcu.edu/gme\\_posters](https://scholarscompass.vcu.edu/gme_posters)



Part of the [Interprofessional Education Commons](#), [Nervous System Diseases Commons](#), [Neurosciences Commons](#), [Obstetrics and Gynecology Commons](#), [Rehabilitation and Therapy Commons](#), and the [Reproductive and Urinary Physiology Commons](#)

© The Author

---

Downloaded from

[https://scholarscompass.vcu.edu/gme\\_posters/24](https://scholarscompass.vcu.edu/gme_posters/24)

This Clinical Case Reports is brought to you for free and open access by the VCU Health at VCU Scholars Compass. It has been accepted for inclusion in Graduate Medical Education (GME) Resident and Fellow Research Day Posters by an authorized administrator of VCU Scholars Compass. For more information, please contact [libcompass@vcu.edu](mailto:libcompass@vcu.edu).

# Ectopic pregnancy in a woman with T9 AIS A paraplegia secondary to high-grade spinal cord pilocytic astrocytoma

Elisabeth K. Acker, D.O. - Fellow, Spinal Cord Injury Medicine



## Background

- In the United States, 20,000 women of childbearing age have a spinal cord injury (SCI).<sup>1</sup>
- After sustaining a SCI, individuals often benefit from acute inpatient rehabilitation, where they receive care from an inter-disciplinary team that addresses resultant medical complications and functional changes, with goals of maximizing independence and returning to the community.
- While SCI induces transient amenorrhea immediately after injury, women generally have normal reproductive function after SCI, and their fertility is unimpaired.<sup>2</sup> 14-18% of women with SCI have children after injury.<sup>3</sup>
- Complications inherent to SCI, however, including autonomic dysreflexia, pulmonary dysfunction, neurogenic bladder, neurogenic bowel, venous thromboembolism, pressure injuries, and decreased function, are often exacerbated during pregnancy.<sup>4</sup>

## Methods

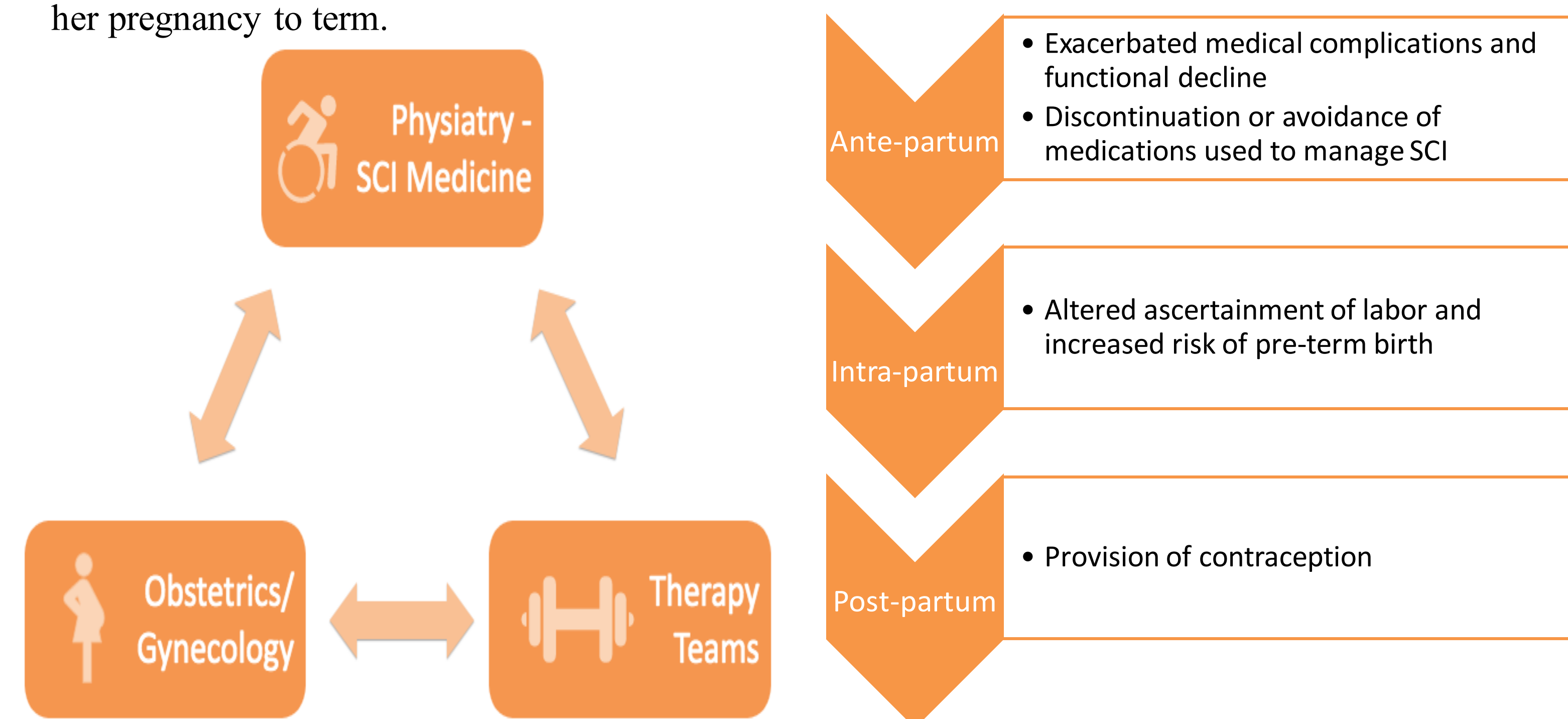
- This is a case report on a female Veteran who initially presented to the McGuire VA Medical Center's (VAMC) Spinal Cord Injury & Disorders (SCI&D) service for a comprehensive evaluation, who's diagnosed pregnancy warranted coordination of medical care with the VCU Health System.

## Acknowledgements

- Thank you to Dr. Sean McAvoy for his clinical guidance while managing this case, and to Ms. Genevieve Bennett for her role in care coordination.

## Case Presentation

- A 37-year-old female (G5P3013) with T9 AIS A paraplegia secondary to high-grade spinal cord astrocytoma presented to the VAMC SCI&D service for evaluation of her neurogenic bowel and bladder, and maximization of her functional status.
- The patient brought to medical attention her recent missed menstrual period and sexual activity. Clinical presentation was also notable for sinus tachycardia, normocytic anemia with a recent 1.5gm/dL drop in Hgb, and later development of severe lower abdominal pain.
- Labs revealed an elevated and appropriately increasing serum beta-HCG consistent with pregnancy. She verbalized intent to carry her pregnancy to term.
- The VAMC's Women's Health Center coordinated for the patient to receive further evaluation by VCU's Maternal Fetal Medicine team in their high-risk clinic.
- The patient's transvaginal ultrasound revealed a mass between the uterus and left ovary, consistent with an ectopic pregnancy; there was also a fluid collection near the cervix, concerning for blood. She underwent laparoscopic salpingectomy and ectopic pregnancy and hemoperitoneum removal.
- Prior to diagnosing the pregnancy's ectopic nature, she was counseled on ante-partum medication usage and anticipated complications of SCI exacerbated by pregnancy.



## References

1. Andretta E, Landi LM, Cianfrocca M, Manassero A, Risi O, Artuso G. Bladder management during pregnancy in women with spinal-cord injury: an observational, multicenter study. *Int Urogynecol J.* 2019;30(2):293-300. doi:10.1007/s00192-018-3620-8
2. Stoffel JT, Van der Aa F, Wittmann D, Yande S, Elliott S. Fertility and sexuality in the spinal cord injury patient. *World J Urol.* 2018;36(10):1577-1585. doi:10.1007/s00345-018-2347-y
3. Bertschy S, Schmidt M, Fiebag K, Lange U, Kues S, Kurze I. Guideline for the management of pre-, intra-, and postpartum care of women with a spinal cord injury. *Spinal Cord.* 2020;58(4):449-458. doi:10.1038/s41393-019-0389-7
4. McLain, A and Alexander, MS. Women's Health Challenges After Spinal Cord Injuries and Disorders. *Spinal Cord Medicine*, edited by Kirshblum, S and Lin, VW, New York, Demos Medical Publishing, 2019, pp. 955-986
5. Courtois F, Alexander M, McLain ABJ. Women's Sexual Health and Reproductive Function After SCI. *Top Spinal Cord Inj Rehabil.* 2017;23(1):20-30. doi:10.1310/sci2301-20

## Discussion

- Our patient's high-risk pregnancy raises the importance of coordinated care between the psychiatry and obstetrics (OB) teams, as adverse outcomes can occur.
- Given the extent of our patient's SCI, her ability to ascertain symptoms of ectopic pregnancy – including severe abdominal or pelvic pain – could have been blunted, raising her risk of morbidity and mortality.
- It is vital for the interdisciplinary team to discuss additional unique matters related to ante-, intra-, and post-partum care with women whose pregnancy progresses.
- Medications commonly used to manage complications of SCI often warrant discontinuation or avoidance, given some risk of teratogenic effects.<sup>4</sup>
- Pregnant women with SCI have two times higher risk of experiencing a pre-term birth as compared to those without injury, necessitating close monitoring by OB.<sup>5</sup>
- As injured women of reproductive age have normal reproductive function, contraception should be discussed.

## Conclusion

- After sustaining a SCI, a woman of reproductive age has unimpaired fertility and reproductive potential.
- Pregnancy accentuates complications that women with SCI are already at risk for.
- The interdisciplinary team has an integral role in counseling a woman with SCI about unique considerations during the ante-, intra-, and post-partum stages.