

Hemospermia: footprint of severe uncontrolled hypertension

Keywords: hemospermia, oligozoospermia, azoospermia, asthenozoospermia, hematuria

Introduction

Hemospermia, also known as hemospermia, bloody sperm and sanguineous sperm, is a commonly isolated symptom characterized by the presence of glossy visible blood in semen and represents 1% of all andrological and urological symptoms.¹ Historical evidences revealed that it had been reported by Hippocrates, Pares, Morgagni, Velpéau, Fournier and Guyon.^{2,3} It is usually painless but can be seen along with hematuria, frequency, dysuria and scrotal pain as well as infertility.^{4,5} It has been indicated that hemospermia can result in azoospermia, oligozoospermia and asthenozoospermia leading to male infertility.^{6,7} Moreover, it often leads to substantial adverse psychological consequences in the patient.⁸ It was found that 77.50% of men with hemospermia had experienced only one or two episodes prior to visiting urologists.⁵ The incidence of hemospermia has been reported as one in every 5,000 new patients presenting to urological out-patient clinics. Most men with hemospermia are likely to be less than 40 years old with symptoms ranging from a few weeks to a few months in duration. The likelihood of recurrent hemospermia is seen in the older age group.⁹

Most often the causes of hemospermia are idiopathic and the precise etiology of this disorder cannot be found in as many as 70 percent of patients.^{8,9} Based on etiological origins, hemospermia as a mono-symptomatic and/or poly-symptomatic disorder has congenital, inflammatory, infective, traumatic, obstructive, neoplastic, iatrogenic and systemic causes.^{8,10} Although hemospermia is usually a symptom of urological problems, severe uncontrolled hypertension as a systemic disorder may be the cause.¹¹⁻¹³ In line with that, previous studies declared that hypertension can be detected in 7.30% of the patients with hemospermia.¹⁴ Based on this concept, since hemospermia treatment depends on the underlying pathological conditions, careful clinical assessments including endorectal magnetic resonance imaging and trans rectal ultrasound¹⁵⁻¹⁸ as well as full general examination including blood pressure readings should be carried out to trace the source of hemospermia and establish efficient therapeutic strategies.

Acknowledgements

None.

Conflict of interest

The author declares no conflict of interest.

References

1. Razek AA, Elhanbly S, Eldeak A. Transrectal ultrasound in patients with hemospermia. *J Ultrasound*. 2010;13(1):28-33.
2. Mulhall JP, Albertsen PC. Haemospermia: diagnosis and management. *Urology*. 1995;46(4):463-467.
3. Munkelwitz R, Krasnokutsky S, Lie J, et al. Current perspectives on hemospermia: a review. *J Androl*. 1997;18(1):6-14.

Volume 3 Issue 2 - 2016

Ali Shalizar Jalali

Department of Basic Sciences, Urmia University, Iran

Correspondence: Ali Shalizar Jalali, Histology and Embryology Research Laboratories, Department of Basic Sciences, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran, Fax 00984432771926, Tel 00984431942593, Email ali_shalizar@yahoo.com, a.shalizar@urmia.ac.ir

Received: October 26, 2016 | **Published:** December 22, 2016

4. Weidner W, Jantos C, Schumacher F, et al. Recurrent haemospermia. Underlying urogenital anomalies and efficacy of imaging procedures. *Br J Urol*. 1991;67(3):317-323.
5. Jones DJ. Haemospermia: a prospective study. *British Journal of Urology*. 1991;67(1):88-90.
6. Mundy AJ, Ryder TA, Edmonds DK. Asthenozoospermia and the human sperm mid-piece. *Hum Reprod*. 1995;10(1):116-119.
7. Singh Iqbal. The sanguineous sperm (hemospermia)-current appraisal and review. *Indian Journal of Surgery*. 2005;67(6):302-307.
8. Kumar P, Kapoor S, Nargund V. Haemospermia-a systemic review. *Ann R Coll Surg Engl*. 2006;88(4):339-342.
9. Akhter W, Khan F, Chingewundoh F. Should every patient with hemospermia be investigated? A critical review. *Cent European J Urol*. 2013;66(1):79-82.
10. Papp GK, Hoznek A, Hegedüs M, et al. Hemospermia. *J Androl*. 1994;15:31S-33S.
11. Hamburger S, Styczynski M, O'Hearne J, et al. Hemospermia and hypertension-two case reports. *J Kans Med Soc*. 1980;81(10):459-460.
12. Iversen PS. Hemospermia and hypertension. *Ugeskr Laeger*. 1987;149(9):596.
13. Bhaduri S, Riley VC. Haemospermia associated with malignant hypertension. *Sex Transm Infect*. 1999;75(3):200.
14. Kochakarn W, Leenanupunth C, Olarn KR, et al. Hemospermia: review of the management with 5 years follow-up. *J Med Assoc Thai*. 2001;84(11):1518-1521.
15. Cho IR, Lee MS, Rha KH, et al. Magnetic resonance imaging in hemospermia. *J Urol*. 1997;157(1):258-262.
16. Yagci C, Kupeli S, Tok C, et al. Efficacy of transrectal ultrasonography in the evaluation of hemospermia. *Clin Imaging*. 2004;28(4):286-290.
17. Jianquan Z. Diagnosis and therapeutics of the causative diseases for hemospermia on transrectal ultrasound. *Ultrasound Med Biol*. 2006;32:S249.
18. Prando A. Endorectal magnetic resonance imaging in persistent hemospermia. *Int Braz J Urol*. 2008;34(2):171-177.