

# Hemospermia: Footprint of Severe Uncontrolled Hypertension

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## 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, Velpeau, 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 ultrasound [15-18] 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.

## References

1. Razeq AA, Elhanbly S, Eldeak A (2010) Transrectal ultrasound in patients with hemospermia. *J Ultrasound* 13(1): 28-33.
2. Mulhall JP, Albertsen PC (1995) Haemospermia: diagnosis and management. *Urology* 46(4): 463-467.
3. Munkel witz R, Krasnokutsky S, Lie J, Shah SM, Bayshtok J, et al. (1997) Current perspectives on hemospermia: a review. *J Androl* 18(1): 6-14.
4. Weidner W, Jantos C, Schumacher F, Schiefer HG, Meyhöfer W (1991) Recurrent haemospermia. Underlying urogenital anomalies and

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

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