

# Hemospermia: Review of the Management with 5 Years Follow-Up

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## Abstract

**Objective :** To review our experience with hemospermia and a long term follow-up.

**Material and Method :** Medical records of patients with hemospermia treated at the Division of Urology, Ramathibodi Hospital between 1993 and 1995 were reviewed. Clinical presentation, investigation, diagnosis, treatment, outcomes and long term follow-up were noted.

**Results :** Sixty-eight patients were found and completed follow-up to 5 years. The mean age was 40 years (range 28-62). Physical examination including DRE and urine examinations were done in all of the cases. Special investigations such as PSA, TRUS, IVP and cystourethroscopy were performed in selected cases. Prostatitis was found in 27.9 per cent, tuberculosis in 4.4 per cent, sexually related causes in 5.8 per cent and idiopathic in 61 per cent. No malignancy was found in this study. Hypertension was found in 7.3 per cent of the patients. Thirty-two per cent had recurrent episodes of hemospermia. Specific treatment was used only for prostatitis and tuberculosis. No specific treatment was used for the idiopathic group.

**Conclusions :** Hemospermia is a benign condition. Most of the causes were from idiopathic and inflammation. Only simple investigation was needed and treatment was recommended depending on the diagnosis and no specific treatment was needed for idiopathic cause.

**Key word :** Hemospermia, Ejaculation, Management, Outcomes

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Hemospermia is a common symptom among young men<sup>(1)</sup>. Although it has little clinical significance, blood in the ejaculate causes great consternation for many men. Most of the causes of this condition seem to be idiopathic but some urologic conditions cause bloody ejaculation. A few studies with this entity have been reported in the literatures with only a short-term follow-up<sup>(1,2)</sup>. The aim of this study was to review the experience with hemospermia and 5 years follow-up.

## MATERIAL AND METHOD

Between 1993 and 1995, 76 patients who presented with bloody ejaculation were treated at the Division of Urology, Department of Surgery, Ramathibodi Hospital. Sixty-eight patients came for an annual check up every year and the rest were lost to follow-up. All of the medical records were reviewed. Clinical presentation, physical examination, lab investigation, diagnosis, treatments, outcomes and long-term follow-up were noted.

## RESULTS

Of the 68 patients, the mean age was 40 years (range 28-62). The duration of symptoms ranged from 0.5 to 6 months. Six patients (8.82%) had painful ejaculation associated with hemospermia, three cases (4.4%) had perineal pain and four cases (5.8%) were related to sexual over indulgence. No history of trauma at the genitalia as well as the perineal area was noted. Physical examination included general appearance, blood pressure, signs of bleeding tendency, genital organ and digital rectal examination (DRE) were done in all of the cases. Lab investigations included urine examination, prostatic specific antigen (PSA) if prostate cancer was suspected, prostatic secretion was sent for examination in five cases. Cystourethroscopy was done in fifteen cases (22%) due to hematuria and no abnormality was noted. Intravenous pyelography (IVP) was done in nineteen cases (27.9%) due to hematuria or pain but no abnormality was detected. All PSA were within normal limits. The diagnosis was chronic prostatitis in 19 cases (27.9%), tuberculosis due to bead-like vas deferens in 3 cases (4.4%), and sexual trauma in four cases (5.8%). All of the rest were classified as idiopathic (61%). No systemic disease with bleeding tendency (such as liver disease, hematological disorder) was found in this study. At

follow-up, twenty-two cases (32%) had recurrent hemospermia ranging from 2-4 times in the first year. Only two cases had recurrent hemospermia in the third year and no hemospermia was noted in all of the cases after three years from the first episode. All of the recurrent cases were in the idiopathic group. Five cases (7.3%) had hypertension and no hemospermia was noted after treatment. No malignancy was found in this study.

Regarding treatment, antibiotics were given for chronic prostatitis in 19 cases, anti TB drugs were given in 3 cases and no specific treatment was received in all of the rest (such as reassurance, anxiolytic and supportive treatment). Up to now, TUR P was carried out in two cases in the chronic prostatitis group due to lower urinary tract symptoms that did not respond to medication. The pathological examination revealed benign prostatic hyperplasia with chronic prostatitis.

## DISCUSSION

Hemospermia is a common and worrying symptom among young men but the prevalence remains unknown<sup>(1)</sup>. The symptom has been recognized for a long time and can result from many causes. In a review of many reported cases, the etiologies included seminal vesiculitis, tuberculosis, prostatitis, prostatic telangiectasia, urethral polyp, schistosomiasis or even carcinoma of the prostate gland and urethra<sup>(1-3)</sup>. The cause could not be identified in most of the cases so they were classified as idiopathic. Ganabathi et al reported 46 per cent idiopathic cases in their series<sup>(4)</sup>. Lesions of the prostate accounted for a large number of the cases of hemospermia and include polyps, vascular lesions, calculi, prostatitis, and cancer<sup>(5)</sup>. Jones reported 30 per cent of hemospermia caused by prostatitis<sup>(2)</sup>. Prostatic telangiectasia and varices were the other common cause and can be presented with recurrent hemospermia<sup>(1)</sup>. Urethral lesions such as cysts, polyps, condyloma, stricture and cancer were uncommon causes of hemospermia. Seminal vesiculitis and cysts were reported as the cause of hemospermia but malignancies of seminal vesicles are quite rare<sup>(1)</sup>. Tuberculosis was the common cause of infectious etiology of hemospermia<sup>(6)</sup>. Cytomegaloviral infection and schistosomiasis were also reported as the etiology of bloody ejaculation<sup>(7)</sup>. Some systemic diseases that have been reported were hyper-

tension, liver disease, lymphoma and other bleeding tendency conditions<sup>(1)</sup>. Some reports showed the correlation of hemospermia with trauma with or without correlation with sexual intercourse<sup>(2)</sup>.

For the diagnosis of the cause of hemospermia, a good history that concentrates on trauma, infection and bleeding disorders is often helpful in narrowing the differential diagnosis<sup>(2)</sup>. The physical examination should include blood pressure, signs of bleeding tendency, genitalia especially testes and vas deferens<sup>(1)</sup>. Tuberculosis can be diagnosed by physical examination and confirmed by lab investigations<sup>(6)</sup>. Digital rectal examination (DRE) is crucial, special attention should be given to the prostate and seminal vesicles and the presence of any abnormal mass. Urine examination is helpful because urinary tract infection and associated hematuria can lead to the final diagnosis<sup>(1)</sup>. We found 27 per cent of cases that had hematuria but no specific diagnosis was done. Transrectal ultrasonography (TRUS) showed abnormal findings in many series such as dilated seminal vesicles, cyst, and calculi<sup>(8)</sup>. Magnetic resonance imaging (MRI) can provide

better information about seminal vesicles but no study utilizing this study in patients with hemospermia has been reported<sup>(9)</sup>.

Treatment is predicated on diagnostic findings. Infection requires appropriate antibiotic therapy. Urethral or prostate varices are best fulgurated, whereas, cysts either of the seminal vesicles or prostatic urethra can be aspirated transrectally<sup>(1)</sup>. The primary goal of the urologist is to allay the anxiety of the frightened patient, because hemospermia is rarely associated with any significant abnormality and can transiently be resolved by time<sup>(2)</sup>. There was no specific etiology for the hematospermia and full investigation was unnecessary<sup>(1,2)</sup>.

## SUMMARY

Hemospermia is a benign condition and most cases result from treatable conditions such as infection or inflammation processes. Simple investigations alone should identify pathology and very few patients will require extensive or invasive investigations. Treatment depends on the diagnosis but often simply involves reassurance.

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## การหลั่งน้ำกามปนเลือด: ประสบการณ์การรักษาและติดตามผู้ป่วย 5 ปี

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**วัตถุประสงค์ :** เพื่อศึกษาประสบการณ์การรักษาผู้ป่วยชายที่หลั่งน้ำกามปนเลือด พร้อมกับการติดตามผู้ป่วยในระยะยา เนื่องจากภาวะนี้พบได้บ่อย มักจะสร้างความวิตกกังวลแก่ผู้ป่วยอย่างยิ่ง

**วัสดุและวิธีการ :** ศึกษาผู้ป่วยที่มารับการรักษาด้วยเรื่องหลั่งน้ำกามมีเลือดปน ระหว่าง พ.ศ. 2536-2538 ที่หน่วยศัลยศาสตร์ระบบทางเดินปัสสาวะ ภาควิชาศัลยศาสตร์ โรงพยาบาลรามาธิบดี ศึกษาถึงอาการ และสิ่งที่พบร่วมกับการหลั่งน้ำกาม ผลการตรวจร่างกาย การตรวจปัสสาวะ และการสืบค้น การวินิจฉัย การรักษารวมถึงผลในระยะยา เมื่อติดตามมา 5 ปี

**ผลการศึกษา :** มีผู้ป่วยที่สามารถติดตามการรักษาได้ครบถ้วนทั้งหมด 68 คน อายุเฉลี่ย 40 ปี (28-62) ทุกราย ได้รับการตรวจร่างกายโดยทั่วไป การตรวจอวัยวะสืบพันธุ์ การตรวจทางทวารหนักรวมถึงการตรวจปัสสาวะ ส่วนการตรวจพิเศษ เช่น PSA, อัลตร้าซาวน์, IVP หรือการส่องกล้องกระเพาะปัสสาวะทำเป็นบางรายเนื่องมีไข้บ่งชี้ พบว่าผู้ป่วยได้รับการวินิจฉัยว่าเป็นต่อมลูกหมากอักเสบร้อยละ 27.9 วัณโรคร้อยละ 4.4, เกี้ยวห้องกับเพศสัมพันธ์ร้อยละ 5.8 และไม่ทราบสาเหตุร้อยละ 61 ผู้ป่วยร้อยละ 7.3 มีความดันโลหิตสูงร่วมด้วย ไม่พบผู้ป่วยที่เป็นมะเร็งใน การศึกษาครั้งนี้ ผู้ป่วยร้อยละ 32 มีอาการเกิดซ้ำหลังจากหายแล้ว ผู้ป่วยที่ได้รับการวินิจฉัยต่อมลูกหมากอักเสบและวัณโรคได้รับยาปฏิชีวนะ ส่วนกลุ่มที่ไม่ทราบสาเหตุไม่มีการรักษาเฉพาะโรค

**สรุป :** การหลั่งน้ำกามปนเลือดเกิดจากสาเหตุที่ไม่รุนแรง หากได้รับการซักประวัติและตรวจร่างกายที่ดีร่วมกับการตรวจทางห้องปฏิบัติการที่เหมาะสม สามารถให้การรักษาได้ไม่มีความจำเป็นจะต้องตรวจพิเศษและกลุ่มที่ไม่ทราบสาเหตุไม่มีการรักษาที่เฉพาะกิจสามารถหายได้

**คำสำคัญ :** การหลั่งน้ำกามปนเลือด, การรักษา, ผลการรักษา

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