SHORT COMMUNICATION

Occurrence of Nonpersistent Hematospermia After a Prolonged Period of Daily Ejaculatory Intensity Longer Than 3 Weeks

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A prolonged period of daily ejaculations via masturbation may result in an episode of hematospermia, possibly due to stress applied to the vasculature of the reproductive system.

KEY WORDS: Ejaculation; hematospermia; semen; sexual abstinence.

INTRODUCTION

The occurrence of hematospermia is an event that rarely becomes a cause of major concern and tends to disappear without treatment. However, recurrent hematospermia could be a sign of a deeper problem as in inflammation of accessory sex glands (prostate, seminal vesicles), infection (Schistosomiasis), obstructions (cyst, blockade of the ejaculatory ducts, tumors), and hypertension (1). As of today, one of the major recognized consequences of frequent ejaculation in the human male is a decrease of the sperm concentration and semen volume (2–5). It is our practice to suggest to the patients undergoing seminal evaluations or therapeutic procedures to maintain a frequent ejaculation schedule of 2–3 days per week. This regimen seems to promote the presence of “younger” spermatozoa available in the ejaculate, as compared to maintaining prolonged abstinence and a higher proportion of senescent spermatozoa (6,7). In this report, the occurrence of hematospermia possibly due to frequent ejaculations, for a prolonged period of days, in a normozoospermic subject is described.

MATERIALS AND METHODS

The subject is a 34-year-old able-bodied man with no history of previous medical conditions and who produces normozoospermic semen specimens as confirmed by various semen analyses performed previous to the hematospermia episode. The subject underwent a regimen of at least one ejaculation per day for a period of approximately 25 days. During the last ejaculation corresponding to this interval, the subject noticed the presence of pink coloration in the ejaculate. Another semen sample was produced after 3 days of abstinence, characterized by heavy bleeding and red coloration. At this point the subject was advised to stop ejaculations for 14 days. After this period another ejaculate was produced, which was characterized by coagulated blood clumps and dark-brown coloration. Another abstinence period of 3 days was observed. The next ejaculate produced after this period was devoid of blood.

RESULTS

The semen characteristics of baseline ejaculates and the specimen produced after the last evidence of hematospermia are shown in Table I. The semen volume produced after the hematospermia episode and abstinence of 14 days was twice of the average baseline values for this subject, and quantitative/qualitative sperm characteristics were within normal limits. During the evaluation period, no evidence of pathogenesis, trauma, infection, or bleeding disorders was found. The only complaint coming from the subject was a mild nonpersistent discomfort, from the lower left testicle/cauda epididymis area. This discomfort was experienced after ejaculation during the first signs of hematospermia and during the 14 days of abstinence. The increase in semen volume observed after this period probably reflects the accumulation of secretions from the accessory sex glands. In addition, the subject has continued producing ejaculates devoid of blood, so far for 4 months, following the suggested regimen of 2–3 ejaculations per week.

Table I. Seminal Characteristics of Baseline Semen Specimens and the Specimen Produced After Disappearance of Hematospermia Signs

Semen source	Semen characteristics			
	Volume (mL)	Concentration ($\times 10^6$ /mL)	Motility (%)	Morphology (%)
Baseline ^a	3.0	92.0	65.0	41.0
Posthematospermia ^b	6.0	110.0	62.0	37.0

^a Average baseline semen values of specimens produced before the occurrence of hematospermia.

^b Seminal characteristics after disappearance of hematospermia.

DISCUSSION

In general, the presence of blood in subjects younger than 40 years is not associated with malignancy, and the condition tends to resolve without treatment after 1–2 months (8). In subjects older than 40 years, persistent hematospermia could be a sign of pathology (9). In the case currently under consideration, the fact that the hematospermia episode resolved after an abstinence period of 14 days further evidences the lack of malignancy, or other causes known to be associated with hematospermia episodes, not seen in this subject. Furthermore, no other physical or medical conditions were present to associate the hematospermia episode with a preexisting condition. It is proposed that the presence of blood in the semen could most likely be occurred by rupture of a blood vessel in conjunction with the discomfort experienced in the testis or epididymis, which may have been subjected to increased contractions events due to the continuous ejaculations (9–12). It is possible that the epididymal duct became sensitive, such as in friable vasculature, or could not recover its normal function due to the continuous ejaculations. On the basis of this observation, the patients should be advised about the possible effects of daily ejaculations for a prolonged period. The sexual history and ejaculation frequency should also be requested when performing the evaluation of the patient in cases on hematospermia.

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