Finastride for the treatment of primary haematospermia

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Abstract

This is a prospective study on (41) patients with primary haematospermia from Jan 2008 to Jan 2009. Patients age ranged from (22-40) years (mean 31.7 years). All patients were asymptomatic except for haematospermia which was continuous for more than one month. All had a full survey for any causes of haematospermia. Twenty patients were given a placebo; the others were given finastride for 2 weeks.

Key words: Haematospermia, finastride.

Introduction

The presence of blood in the ejaculate is called haematospermia or hemospermia. Haematospermia is not uncommon and may affect men of any age after puberty, but its peak incidence is in men (30-40) years old. About (85-90%) of all patients that have haematospermia will have repeated episodes (1). Most men have symptoms ranging from a few weeks to a few months in duration. The likelihood of recurrent haematospermia is seen in the older age group (2). Most patients who notice haematospermia consult their doctor promptly after the first episode. Like other obscure clinical conditions, systematic clinical history and assessment help to evaluate the causation of haematospermia. It is also necessary to know whether haematospermia is an isolated or a recurrent episode (3).

Primary haematospermia is when blood in the ejaculate is the only symptom. Patients who have this type of haematospermia with no other findings are almost always found to have no other problem. About 15% of patients will have one episode and never have another (4). In the past, physicians have used female hormones, such as stilbestrol or Premarin to treat primary haematospermia, believing the disease to be an inflammation of the seminal vesicles. Female hormone treatment often resulted in relief from the bleeding, but the side effects included breast swelling and tenderness, and lack of libido (5).

Secondary haematospermia' is used when a cause of bleeding is known or suspected, such as immediately after a prostate biopsy, or in the presence of a urinary or prostate infection or cancer. Unusual causes include tuberculosis, parasitic infections, hypertension and any diseases that affect blood clotting such as haemophilia and chronic liver disease (6). Finastride synthesized in 1984, well absorbed orally with an oral bioavailability of 63%. It undergoes extensive hepatic metabolism primarily by CYP3A4 to metabolites that are inactive and are eliminated through bile and urine, it reduces serum and prostate DHT levels by about (70% and 85-90%) respectively by suppressing 5α-reductase. The half life of finasteride is (6) hours and it is 90% bound to plasma proteins. It has minimal side effects (7). In this study only those with primary haematospermia were included.

Subjects and Methods

A single blind case control study included (41) patients attended the consultancy of urology at Azadi general hospital-Kirkuk Governorate from Jan 2008 till Jan 2009. Patients ages ranged from (22 - 40) years (mean 31.7 years). All patients were complaining of primary haematospermia for more than one month, 12 had previous attacks and in 29 patients it was the first attack, all had full survey to find the cause of their haematospermia which included, a full history specially for trauma, 2-drug intake etc.

A complete physical examination was done for all patients including blood pressure, digital rectal examination (D.R.E). Investigations included a (condom test), carried out where the patient is asked to collect the ejaculate in the condom which is examined for blood, urinalysis, trans-rectal ultrasound (TRUS), Complete blood picture (CBP), Erythrocyte sedimentation rate(E.S.R.),blood film and morphology, Prostatic Specific Antigen (P.S.A) estimation, Chest radiography, liver and renal function tests, all of the patients had normal results. Patients were divided into two groups.

Finastride (10) mg daily in two divided doses for two weeks was given to the first group (21 patients), the second group (20 patients) was given placebo (vitamin B6) twice daily for 2 weeks. All patients were followed up monthly for three months for recurrence of the haematospermia. Chi-quare test was used for statistical analysis.

Results

In the first group (those receiving finasteride 10 mg daily for 2 weeks), haematospermia disappeared in (16) patients, but in second group (those receiving placebo), only (7) had absent haematospermia with in 2 weeks, as shown in table (1). The time of response in (6) patients in the first group was with in (10) days of treatment, but the other (10) patients the response was after (10) days as shown in table (2). Follow up of the patients showed recurrence of the haematospermia in(2) patients from first group, but in second group the haematospermia reoccurred in (4) patients in whom the haematospermia disappeared (table 1), and it was continuous in (10) patients out of the (13) patients of the same group, as shown in table (3).

Discussion

The true prevalence of haematospermia is unknown because most ejaculations occur intravaginally and haematospermia often remains unrecognized (3) Haematospermia is usually associated with inflammatory conditions of the seminal vesicles or prostate. Both the prostate and the seminal vesicles are androgen-dependent accessory organs (6).

In about 50% of patients the cause of haematospermia is not clearly understood or known (8). A retrospective study on (107) patients in Japan showed that 75% of the cases had unknown cause in those patients under the age of 40 years (9). In the past, physicians have used female hormones, such as stilbestrol or Premarin to treat primary haematospermia, believing the disease to be an inflammation of the seminal vesicles. Female hormone treatment often resulted in relief from the bleeding, but the side effects included breast swelling and tenderness, and lack of libido. For the most part its use has been discontinued (5, 10). Jong Hwan Park showed a success rate of (50%) in patients with haematospermia using DES (Diethylstilbestrol) after 4 weeks of treatment (11). Another study in Korea also showed that finastride had a success rate of (75%) in patients having haematospermia due to prostatitis, and (31.6%) in non-prostatitis haematospermia (12).

In the University of British Colombia Clinical trials on using finastride in treating haematospermia in patients underwent prostatic biopsy shows promising results (13). In this study (76.2%)of the patients who were given finastride (10) mg(first group) had absent haematospermia,(37.5%)of them responded within first (10)days of treatment, and (62.5%)responded after 10 days, in comparison to those patients who had placebo(second group)the response rate was only(35%) which is statically significant (p.value>0.05), this result shows that finastride is superior to DES which showed (50%)response rate in a study done in Korea (11) ,keeping in mind that finastride has less side effects than DES (7,11). Regarding recurrence rate of haematospermia, in the first group it was (9.5%), but in the second group it was (20%) which is also significant statistically.

Conclusions &recommendations:

Depending on the results we conclude that finastride is an effective, safe, readily available drug in the treatment of primary haematospermia, and we recommend to be used in patients suffering

from primary haematospermia when it is recurrent or continuous for more than one month.

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Table (1): Response rate in both groups after 2 weeks of treatment.

Groups	Haematospermia disappearance	No response
First group (21 patients)	16(76.2%)	5(23.8%)
Second group (21 patients)	7(35%)	13(65%)

p.value<0.05-significant

Table (2).the response time in first group patients

%	Number	Response
37.5	6	With in 10 days
62.5	10	More than 10 days
100	16	total

p.value<0.05-significant

Table -3-reccurance rate of haematpspermia in both groups.

second group	first group	Haematospermia
10(50%)	5(23.8%)	Continuous from the start
4(20%)	2(9.5%)	Recurrence after drug withdrawal
6(30%)	14(66.6%)	No recurrence
20(100%)	21(100%)	total

p.value<0.05-significant