SPECTRUM OF MENSTRUAL PROBLEMS AFTER TUBAL LIGATION
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ABSTRACT

Objective: To determine the frequency of menstrual problems after tubal ligation.

Study Design: Descriptive study.

Place and Duration of Study: This study was carried out in gynae department of PAF Hospital Sargodha, Pakistan from September 2011 to September 2012.

Patients and methods: Two hundred patients were included in the study with menstrual problems after tubal ligation.

Results: Forty seven percent of patients presented with menorrhagia, 28% presented with metrorrhagia, 13% patients were having complaints of polymenorrhoea and 5% patients presented with dysmenorrhoea and 7% had oligomenorrhoea after tubal ligation. Thirty one percent of patients ended up in hysterectomy and 37% of patients had improvement of symptoms with medical treatment.

Conclusion: Menstrual problem is a common complaint in our gynaecological patients. A large number of these patients had history of tubal ligation. Menorrhagia, metrorrhagia, polymenorrhoea and dysmenorrhoea can occur after tubal ligation. Patients giving the history of menstrual problems and wants tubal ligation should be counselled earlier for these symptoms.

Keywords: Dysmenorrhoea, Menorrhagia, Oligomenorrhea.

INTRODUCTION

Disturbances in the pattern of menstruation is a common clinical presentation at a gynae clinic. Disturbance in the menstrual pattern can be metrorrhagia (irregular vaginal bleeding), continuous bleeding or spotting PV and menorrhagia (heavy menstrual bleeding). Abnormalities of menstrual bleeding can be due to organic causes like fibroid, infection, malignancy or bleeding disorders1,2. Heavy menstrual bleeding can occur in the absence of recognizable pelvic pathology known as DUB (dysfunctional uterine bleeding)3. There are factors other than sterilization that effect menstrual pattern. Menstrual disturbance can occur after tubal sterilization, although this is not the case in every patient of tubal ligation. Most of the menstrual changes occur after first year of sterilization. About 61% of patients experience menstrual problems after first year. The menstrual changes decrease to 34% in 3-4 years4. In long term follow up after sterilization for 4-5 years, menstrual problems are depicted after such a long time5. Age of the patient at the time of sterilization has also been linked with the onset of menstrual problems. Different hypothesis have been suggested for this problem and no exact cause is determined6.

PATIENTS AND METHODS

This descriptive study was carried out at the gynae department of PAF Hospital Sargodha from September 2011 to September 2012. Two hundred patients were included in the study with menstrual problems after tubal ligation. Patients with menstrual abnormalities and menorrhagia and patients with thyroid disorder or who had menstrual abnormalities before ligation were excluded from the study group. Ligation was done by Pomery’s method either by mini laparotomy or at the time of caesarean section. After determining the health status, ruling out the medical and organic problems, patients who developed this problem for more than one year were enquired about their menstrual irregularities. Different types of the menstrual
abnormalities were depicted and analyzed. Data was analyzed using SPSS version 15. Frequency and percentages were used to describe the results.

RESULTS

There were total 200 patients in the study. Eighty (41%) patients were between 32-40 years. Seventy two (36%) patients were around 40-44 years of age and 46% patients (23%) were more than 44 years of age. Parity of the patients with menstrual problems were assessed. Twenty four (12%) patients were among p2-p4. While 107 (53%) were among those patients having 4-6 children. 69 (34%) were having more than 6 children. Spectrum of menstrual problems noted after tubal ligation was in the order of heavy menstrual bleeding (47%), irregular menstrual cycle (28%) polymenorrhoea (13%), dysmenorrhea (5%) and oligomenorrhoea (7%). Patients presenting with these problems required different modalities of treatment. Seventy four (37%) patients had improvement of symptoms with medical treatment including exogenous hormones. Twenty six percent of the patients were very apprehensive and because of irregularity of cycle had diagnostic D & C was done to rule out other pelvic pathology. Sixty two (31%) patients had menstrual problems that did not respond to medical treatment and finally they ended up in hysterectomy. Twelve (6%) patients had insertion of MIRENA due to their menstrual problems and they did not want to have surgery. Results shown in table-1.

DISCUSSION

Tubal sterilization is a permanent method of contraception. There has been increasing concern that tubal ligation may increase the risk of menstrual dysfunction. Different hypotheses have been suggested, these hypothesis are either disturbances in ovarian function as a result of compromise of tubo-ovarian blood supply. Different methods of fallopian tube occlusion can destroy different parts of tube and its blood supply. Another hypothesis is development of endometriosis because of occlusion of fallopian tube. Similarly estrogen progesterone imbalance has been blamed for this problem. Endocrine and psychological problems have also been reported in women subjected to sterilization.

Table-1: Spectrum of menstrual problems after tubal ligation.

<table>
<thead>
<tr>
<th>Menstrual problems</th>
<th>n (%)</th>
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<tbody>
<tr>
<td>Menorrhagia</td>
<td>94 (47%)</td>
</tr>
<tr>
<td>Irregular menstrual cycle</td>
<td>56 (28%)</td>
</tr>
<tr>
<td>Polymenorrhoea</td>
<td>26 (13%)</td>
</tr>
<tr>
<td>Dysmenorrhea</td>
<td>10 (5%)</td>
</tr>
<tr>
<td>Oligomenorrhoea</td>
<td>14 (7%)</td>
</tr>
</tbody>
</table>

Table-2: Treatment modalities for menstrual problems after tubal ligation.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical treatment</td>
<td>74 (37%)</td>
</tr>
<tr>
<td>Diagnostic D &amp; C</td>
<td>52 (26%)</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>62 (31%)</td>
</tr>
<tr>
<td>Other treatment like MIRENA (IUCD)</td>
<td>12 (6%)</td>
</tr>
</tbody>
</table>

Heavy menstrual flow after tubal sterilization was a common complaint in our study group. Patients were using 6-8 sanitary pads per day for the first five days. Similar studies done in USA reveal change in the volume of menstrual flow but there was no significant change in the hormonal level in women with or without history of tubal ligation. Pelvic congestion syndrome can occur after tubal sterilization leading to the problems. In our study group, patients after tubal sterilization presented with different types of menstrual abnormalities as irregular vaginal bleeding, inter menstrual spotting, menorrhagia and associated symptoms like dysmenorrhea as well. These symptoms have been depicted in a large multicentre study at Atlanta USA. Sahw et al, in a study concluded that female sterilization although can have menstrual problems as a sequelae, but it is an effective, safe, and feasible method of fertility control with few long term effects on menstrual pattern /cycle. Estrogen deficiency and disturbed estrogen /progesterone ratio resulting from localized hypertension in the ovary when the uterine ovarian arterial loop is occluded after tubal ligation; it is suggested as a
cause of menstrual irregularities after tubal sterilization. Besides menstrual irregularities other complications as dysmenorrhea, dyspareunia, abdominal pain and stress incontinences have been reported after abdominal and vaginal sterilization. In our study group, patients with intractable menorrhagia usually opted for hysterectomy, either because of poor compliance to medical treatment or non responsiveness to hormones. Similar studies have been carried out in India to determine the risk of post ligation hysterectomy and found the risk of operation among post ligation cases was as minimum as in other cases.

In a five year follow up in Auckland, menorrhegia was a common complaint after sterilization and 7.5% had hysterectomy within five years.

Tracson et al, in their histopathology report of uterus after tubal sterilization found myometrial vascular damage, medial arteriolar muscle loss with micro aneurysm formation and occasional rupture after surgical sterilization by tubal diathermy.

CONCLUSION

Menorrhagia, polymenorrhea and other menstrual irregularities are quite common problems in our females. Despite detailed history of past menstrual cycle and medical history, problems occur after tubal ligation. Patients especially having prior menstrual problems or irregularities, should be counselled before opting for this form of contraception.

REFERENCES