Why do women choose endometrial ablation rather than hysterectomy?

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Objective: To determine why women choose endometrial ablation rather than hysterectomy for the treatment of menorrhagia.

Design: Observational study based on postal questionnaires.

Setting: A university hospital.

Patient(s): One hundred eighty randomly selected patients from a cohort of 658 patients who underwent endometrial ablation for the treatment of menorrhagia during the past 7 years.

Intervention(s): None.

Main Outcome Measure(s): Patient attitude about endometrial ablation.

Result(s): One hundred six questionnaires (58.9%) were completed satisfactorily. The average postoperative follow-up period was 45.1 months (range, 3–80 months). Eleven women (10.4%) had undergone repeated endometrial ablation and 8 (7.5%) had undergone hysterectomy. More than half the women indicated that they would find endometrial ablation acceptable even if there was no chance of amenorrhea, if the probability of menstruation becoming lighter was >4:10, if the likelihood of menstrual pain decreasing was >3:10, if the chance of requiring repeated endometrial ablation or hysterectomy was <1:4, and if the risk of uterine cancer after surgery was <1:200. The three most important advantages of endometrial ablation over hysterectomy were perceived to be the avoidance of major surgery, the fast return to normal functioning, and the short hospitalization.

Conclusion(s): Most women who choose endometrial ablation rather than hysterectomy as therapy for menorrhagia are prepared to undergo hysteroscopic surgery even if the chance of success is relatively poor. (Fertil Steril 1998;69:1063-6.)

Key Words: Endometrial ablation, hysterectomy

Techniques of endometrial ablation, such as transcervical resection of the endometrium, increasingly are being offered to women with menorrhagia as an alternative to hysterectomy (1). Endometrial ablation is an attractive alternative because it has several obvious advantages over hysterectomy, including reduced postoperative discomfort, shorter hospitalization, and faster recovery (2–4). However, these new procedures cannot guarantee amenorrhea, they have a variable failure rate that may result in further surgery, and they may have long-term adverse effects such as uterine cancer (5).

Despite these limitations, there has been a tremendous increase in the use of endometrial ablation worldwide. In the United States, for instance, the use of endometrial ablation increased fivefold between 1988 and 1991 (6). In the United Kingdom, more than 10,600 procedures were carried out between April 1993 and October 1994 (7); it should be noted that the first procedure was performed in 1988 (8).

There is, however, scanty information about the expectations of women who are treated by hysteroscopic surgery for their menstrual symptoms, or about why they choose this mode of intervention in preference to hysterectomy. We carried out a study to address these issues because a better understanding of these aspects of the intervention should help identify those patients who are most suitable for endometrial ablation.

MATERIALS AND METHODS

A postal questionnaire was sent to 180 (27.4%) randomly selected women from a cohort of 658 women who had undergone endo-
Characteristics of patients who chose endometrial ablation rather than hysterectomy as treatment of menorrhagia.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All patients treated (n = 658)</th>
<th>Patients who replied to the questionnaire (n = 106)</th>
<th>Patients who did not reply to the questionnaire (n = 74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (±SD) patient age at time of surgery (y)</td>
<td>42.3 ± 6.8</td>
<td>43.2 ± 5.0</td>
<td>42.3 ± 6.3</td>
</tr>
<tr>
<td>Mean (±SD) interval since first ablation (mo)</td>
<td>46.2 ± 18.6</td>
<td>45.1 ± 17.4</td>
<td>48.3 ± 15.9</td>
</tr>
<tr>
<td>No. (%) who underwent repeated endometrial ablation</td>
<td>60 (9.1)</td>
<td>11 (10.4)</td>
<td>7 (9.5)</td>
</tr>
<tr>
<td>No. (%) who underwent hysterectomy</td>
<td>65 (9.9)</td>
<td>8 (7.5)*</td>
<td>5 (6.8)</td>
</tr>
</tbody>
</table>

Note: P = not significant (replied to questionnaire versus did not reply to questionnaire).  
* One woman underwent repeated endometrial ablation and then had a hysterectomy.

Endometrial ablation under our care over the past 7 years, with the expectation that about two thirds would reply. The women had undergone hysteroscopic surgery for symptoms of menorrhagia as an alternative to hysterectomy. The choice of the type of surgery was voluntary and patients were counseled carefully with respect to the relative advantages and disadvantages of the two procedures as they were known at the time (5, 9). The ablation technique used in all cases was transcervical resection of the endometrium as described previously (8). Patients were chosen for this study with the use of computer-generated random numbers.

The questionnaire was designed to gauge patients’ views about various possible outcomes after endometrial ablation. The women were asked about their current menstrual status, whether they had received any further drug therapy for menstrual symptoms, and whether they had undergone repeated endometrial ablation or hysterectomy. Their overall satisfaction with the initial surgery was evaluated using a five-point ordinal scale (ranging from 1 = very dissatisfied to 5 = very satisfied).

Possible outcomes assessed included the chance of amenorrhea, improvement in menstrual flow and pain, the need for repeated surgery or hysterectomy, and the risk of cancer. A list of odds was given on an 11-point scale (e.g., 0:10–10:10) for each item, and the women were asked to mark on the questionnaire what level of chance for that particular outcome would make endometrial ablation acceptable or not acceptable. Finally, they were asked to rank in order of importance a list of 12 reasons why they might have chosen endometrial ablation rather than hysterectomy as therapy for their menstrual symptoms.

RESULTS

One hundred thirteen (62.8%) women returned the questionnaire. Seven of the questionnaires were filled out inappropriately, leaving 106 (58.9%) for analysis. Some answers were confirmed by telephone to ensure that the question had been understood correctly. The characteristics of the women who replied to the questionnaire were similar to those of the women who did not reply, and both subgroups were representative of all the patients who underwent surgery during the study period in terms of age, interval since the initial endometrial ablation, and outcome of the intervention as judged by the need for repeated ablation or hysterectomy (Table 1).

Of the respondents, 89.6% had undergone endometrial ablation >2 years previously. At the time of the survey, 58 (54.7%) had amenorrhea, 94 (88.7%) had not required any further medical therapy for menorrhagia, and 18 (17%) had undergone repeated endometrial ablation or hysterectomy, including 1 woman who had both. Overall, 98 (92.4%) reported that they were either very satisfied or satisfied with the results of endometrial ablation, 3 were unsure, and 5 were dissatisfied, 1 of whom experienced heavier menstrual periods after endometrial ablation, 2 of whom gave no conclusive explanations, and 2 of whom had finally undergone hysterectomy.

Analysis of the 106 questionnaires showed that more than half the women would find endometrial ablation acceptable even if there was no chance of amenorrhea, if the probability of menstruation becoming lighter was at least 4:10, and if the likelihood of menstrual pain decreasing was 3:10 or greater (Fig. 1). With respect to treatment failure necessitating further surgery, >50% of the women reported that they would accept a risk of up to 1:4 of having to undergo either repeated endometrial ablation or hysterectomy (Fig. 1). When asked about the possible risks of developing uterine cancer, slightly more than half the respondents indicated that they would accept a risk as high as 1:200; 31 (29.2%) of the women claimed that they would accept a risk of cancer as high as 1:10.

The responses of the subgroup who had undergone repeated endometrial ablation or hysterectomy for persistent or recurrent menstrual symptoms were similar to those of the group as a whole. For instance, 10 (55.6%) of the 18 women who had undergone further surgery reported that they would still choose endometrial ablation even if there was no chance...
of amenorrhea or if the probability of periods improving or pain decreasing was as low as 3:10. Included in this group are 6 of the 8 women who reported that they were satisfied with their initial treatment even though they ultimately underwent a hysterectomy.

The three most important advantages of endometrial ablation over hysterectomy were regarded as the avoidance of major surgery, the fast recovery, and the short hospitalization (Table 2). Conversely, fear of loss of femininity or of gaining weight after hysterectomy were considered the least significant of the 12 reasons given.

**DISCUSSION**

Our findings were somewhat unexpected and at the same time reassuring. Women who choose endometrial ablation as therapy for their menorrhagia are prepared to undergo this form of intervention even if the chances of treatment failure and the need for further surgery are considerable. Amenorrhea does not seem to be an important therapeutic endpoint, whereas the avoidance of major surgery combined with a short hospitalization and quick recovery are seen as important advantages. As an expression of the strength of feeling of these women against hysterectomy, even a high theoretical risk of cancer seemed acceptable to some. Although

<table>
<thead>
<tr>
<th>Rank</th>
<th>Statement</th>
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<tbody>
<tr>
<td>1</td>
<td>Hysterectomy is a major operation</td>
</tr>
<tr>
<td>2</td>
<td>I wanted to be back to normal/work as soon as possible</td>
</tr>
<tr>
<td>3</td>
<td>I wanted to be out of the hospital as quickly as possible</td>
</tr>
<tr>
<td>4</td>
<td>I would have more postoperative discomfort after a hysterectomy</td>
</tr>
<tr>
<td>5</td>
<td>I did not want to lose my uterus</td>
</tr>
<tr>
<td>6</td>
<td>A friend had a hysterectomy and took a long time to recover</td>
</tr>
<tr>
<td>7</td>
<td>Hysterectomy can ruin your sex life</td>
</tr>
<tr>
<td>8</td>
<td>I did not want a scar</td>
</tr>
<tr>
<td>9</td>
<td>Women gain weight after a hysterectomy</td>
</tr>
<tr>
<td>10</td>
<td>I was too young for a hysterectomy</td>
</tr>
<tr>
<td>11</td>
<td>I would feel less feminine after a hysterectomy</td>
</tr>
<tr>
<td>12</td>
<td>A friend had an endometrial ablation and recommended it</td>
</tr>
</tbody>
</table>

Twelve reasons why endometrial ablation was chosen in preference to hysterectomy, ranked in order of importance by patients (1 = most important to 12 = least important)
there have been some case reports of the development of endometrial carcinoma after endometrial ablation, all those cases occurred in women who were found to have high-risk hyperplasia at the time of their hysteroscopic surgery, and there is no evidence that endometrial ablation directly induces endometrial carcinoma (10–12).

Most published series show that endometrial ablation has a successful outcome in 80%–90% of suitable cases. Results are similar irrespective of the technique used, be it laser ablation (13–15), rollerball coagulation (16–18), or endometrial resection (5, 19) as used in our study. Such a success rate is considerably higher than what >90% of the women in our study would find acceptable. Even if we take into account the worst-case scenario, namely the hysterectomy rate of 48% after laser endometrial ablation reported in one early series (20), more than one third of our patients still would have chosen hysteroscopic surgery as their initial treatment option.

Our results raise two issues. First, it seems likely that most women who request endometrial ablation as therapy for their menstrual symptoms belong to a different population than those who agree to hysterectomy. Amenorrhea is not an important endpoint for these women. Instead, endometrial ablation may be viewed as an alternative to prolonged drug therapy, with the additional benefit of delaying and possibly even avoiding hysterectomy. As a result, eventual hysterectomy is not necessarily regarded as a failure of treatment. This is evidenced by the fact that six of the eight women in our study who ultimately underwent hysterectomy still reported that they were satisfied with their initial treatment.

Second, if women treated by endometrial ablation are different from those undergoing hysterectomy, we may not see as large a decrease in the hysterectomy rate for menorrhagia as might have been at expected when these alternative procedures first were introduced. Two recent surveys in the United Kingdom reported that although there was an exponential increase in the use of endometrial ablation during the period 1988–1993, there also was an increase in the total number of hysterectomies performed (21, 22). Although the interpretation of these data has been challenged (23), this difference in patient populations can explain why it is difficult to recruit women to randomized trials comparing endometrial ablation with hysterectomy (24).

In conclusion, patient expectations and preferences seem to be important determinants of the best type of surgical management for menorrhagia. Careful counseling regarding the likely outcomes after hysterectomy and endometrial ablation is mandatory. Given such counseling, patients will self-select themselves for what they perceive to be the best treatment. Our data indicate that there is no "best-buy" surgery for the treatment of menorrhagia in all patients.

References