Impact of Implementation of an Outpatient Hysteroscopy Service at University Hospital Antonio Pedro (Rio de Janeiro)

Impacto da Implantação de um Serviço de Histeroscopia Ambulatorial no Hospital Universitário Antônio Pedro (Rio de Janeiro)

CLAUDIA BAPTISTA PILLAR¹; RICARDO BASSIL LASMAR²

¹ Physician - Hospital Universitário Antônio Pedro (UFF); ² Adjunct Professor - Faculdade de Medicina da Universidade Federal Fluminense.

ABSTRACT

Introduction: The possibility of obtaining a reliable diagnosis, with minimal discomfort for patients with reduced costs, presents a challenge to health care systems. The use of outpatient hysteroscopy in tertiary-care, especially in a teaching hospital, can identify prevalent diseases in this population. Methods: Case study employing a retrospective descriptive approach, with the objective of evaluating the impact of the implementation of an outpatient hysteroscopy service at Antonio Pedro University Hospital. We compared the results of uterine curettages for the three year period from 2008 to 2010 before hysteroscopy was offered, with data obtained from the reports of hysteroscopies performed in the 18 months from February 2011 to July 2012. Results: 52 patients underwent exploratory uterine curettage compared with 486 hysteroscopies carried out in half the time. Of those who underwent an outpatient hysteroscopy, polypectomy was performed in 152 (31.3%) and myomectomy was performed in 13 (2.7%). Symptom improved and hospitalizations and additional surgical procedures were avoided. Conclusion: These findings confirm published reports that indicate hysteroscopy as the method of choice in the evaluation of the uterine cavity, offering agility in diagnosis and benefits in patient care, teaching and research.

Key words: Hospitals. Teaching. Diagnosis. Outpatient care. Hysteroscopy.

INTRODUCTION

The application of minimally invasive techniques in the diagnosis and treatment of various diseases has been widely disseminated in the medical field. The possibility of obtaining a reliable and effective diagnosis with the patient experiencing minimal discomfort and with reduced costs, brings countless benefits, for the population as well as for public and private health systems.

In recent years, with the reduction in the number of private hospitals under contract with Brazil’s National Health System – Sistema Único de Saúde (SUS) – there have been increased demands placed upon public – and especially university – hospitals. These hospitals have higher costs compared to other hospitals, probably because they focus on tertiary care and carry out teaching/educational activities, requiring more human resources and physical resources and equipment. Technological advances and the trend towards specialization improve health care, but constitute additional costs. Ambulatory and minimally invasive approaches confer advantages, including earlier diagnosis and the reduction of costs related to hospitalization.

In gynecology, outpatient hysteroscopy is now considered the first line in the investigation of abnormal uterine bleeding, a common gynecological complaint in both pre- and postmenopausal women. This minimally invasive approach reduces costs and promotes early diagnosis in a simple and rapid way, which in conjunction with histopathologic evaluation, has a sensitivity of 94% and a specificity of 89% in the detection of uterine cavity abnormalities. Hysteroscopy permits a direct and detailed visualization of the uterine cavity and safe directed...
biopsy with a complication rate around 1%. Complications include vasovagal reactions during the procedure, false passage, uterine perforation and infection.4,8

With advances in the equipment and means for distending the uterus, along with availability of smaller diameter instruments, discomfort associated with the ambulatory hysteroscopic examination has diminished.4,5,6 In addition, it now possible to perform many therapeutic procedures, such as the removal of polyps and fibroids, on an outpatient basis.

This outpatient approach to the investigation of endometrial pathologies reduces the need for hospitalizations for uterine curettage, the standard of care in the past.9,10 Thus, there is a reduction in hospital costs and risks for the patients. More importantly hysteroscopy permits an accurate diagnosis in a shorter period of time, a great value, especially for patients who are symptomatic or that have malignant neoplasms, improving prognosis and quality of life.

Establishing an outpatient hysteroscopy service in a tertiary care setting such as a university hospital helps identify the most prevalent diseases in this population, providing information that might influence therapeutic strategies. And if the service is organized to document and store images and discuss interesting cases in case conferences, research and teaching are enhanced. All this promotes effective care of patients in a shorter period of time, improving the quality of care and enabling cost reductions.

The general aim of this study was to evaluate the impact of establishing an outpatient hysteroscopy service at the Antonio Pedro University Hospital (abbreviated HUAP in Portuguese) initiated in February 2011, emphasizing the benefits obtained in patient care and teaching, as well as aspects related to the cost-effectiveness of this procedure.

We report the results of hysteroscopies performed in the period February 2011 to July 2012, comparing them with the results of another method of evaluation of the uterine cavity, exploratory uterine curettage performed at HUAP, before the advent of outpatient hysteroscopy.

We report the frequency distribution of procedures performed according to their clinical indications, as well as the characteristics of the patients, and histopathologic results obtained by uterine curettage or hysteroscopic directed biopsy.

METHODS

The research strategy was a case study carried out at HUAP. It is a retrospective descriptive study employing an exploratory and qualitative approach. The preparation for data collection involved a manual review of medical records and of the reports of the hysteroscopies performed at this hospital.

In addition, a review of the literature was carried out by searching Pubmed, and database sites of Brazil’s Ministry of Health, about the costs and potential health benefits of the described procedures. The study was approved by the Ethics and Research Committee of the Universidade Federal Fluminense (UFF), opinion number 06398512.0.0000.5243.

We conducted a review of the medical records of the patients who underwent exploratory uterine curettage during the period from January 2008 to January 2011, covering the three years before hysteroscopy began at HUAP. By way of comparison, we described the results of outpatient hysteroscopy for the 18 month period from February 2011 – when the hysteroscopy service at HUAP was established – to July 2012.

Inclusion criteria were: a) all cases of exploratory uterine curettage identified from the procedure log of HUAP’s Surgical Center for the specified period; and b) the outpatient hysteroscopic examinations for which it had been possible to evaluate the uterine cavity.

Exclusion criteria were: a) the outpatient hysteroscopy was incomplete, such that the interior of the uterus was not completely visualized; and b) patients who declined to participate in the study.

Before the introduction of outpatient hysteroscopy, exploratory uterine curettage with histopathologic evaluation of the tissue obtained was considered the standard method of investigation of the uterine cavity. The patients chosen for investigation of the uterine cavity by exploratory curettages, whether coming from primary care or the general outpatient gynecology service at HUAP, followed a systematized sequence of care. After clinical evaluation and ultrasound, the patients were registered in the clinic curettage scheduling book, and waited for the summons, in accordance with surgical center availability.

The number of cases of exploratory uterine curettages performed at the surgical center in the period described was determined. Patients were
admitted to the hospital as inpatients and the curettage was performed under general anesthesia. The number of cases, mean age of the patients, indication for the procedure, histopathology findings, and duration of the hospitalization were determined.

After the outpatient hysteroscopy service was established, patients were evaluated by a gynecologist, and those with a clinical indication were referred to hysteroscopy clinic, and were scheduled for the procedure usually within a period of 7 to 30 days.

Patients were referred in accordance with the findings obtained during the hysteroscopy. When it was possible to evaluate the uterine cavity, in the absence of abnormal findings, no additional procedure or just an endometrial biopsy was performed. Of those patients with abnormalities on the hysteroscopic examination, some could be resolved on an outpatient basis, while other needed to be referred for hysteroscopic surgery or more complex surgery. For the small percentage of cases where the uterine cavity could not be evaluated, patients underwent hysteroscopy under sedation when it could be scheduled in the surgical center.

We analyzed the outpatient hysteroscopy reports performed at HUAP during the 18 month period starting in February 2011. Indications for the hysteroscopy examination included: abnormal uterine bleeding, abnormal ultrasound findings, infertility, and others.

Ultrasound findings considered an indication for the hysteroscopy examination included: endometrium with changes in echotexture, findings suggestive of uterine polyps or submucosal fibroids, and in postmenopausal women (in the absence of hormone replacement therapy) an endometrial thickness exceeding 4 mm. Other indications for hysteroscopy included cases with abnormal colpocitology, an endocervical polyp found on speculum examination, reports of previously abnormal hysteroscopy, and for intrauterine device (IUD) removal when the string could not be visualized during the speculum exam.

All procedures were performed in the HUAP Gynecology Clinic. All patients were counseled about possible discomfort during the procedure and that the procedure could be halted when requested. The hysteroscopies were performed or supervised by two qualified professionals, experienced in hysteroscopy, a gynecology resident of and final year medical student of the Universidade Federal Fluminense School of Medicine. Physiological (0.9% normal saline) solution was used as the liquid distension medium, by vaginoscopy, without placement of a speculum or Pozzi, just by bimanual examination before the procedure. The mean time the patient was in the exam room was 30 minutes.

The hysteroscopy examination was considered normal when no abnormal finding was identified in the uterine cavity. Abnormal findings during the examination were divided into: a) uterine (endocervical and/or endometrial) polyps; b) endometrial hypertrophy, c) uterine myoma; d) cancer of the cervix and/or uterine body; e) other, encompassing adhesions, endometritis, uterine malformations, or the presence of foreign bodies; and f) multiple associated findings, when more than one abnormal finding per patient was encountered.

We profiled the patient’s age, the stage of the reproductive cycle, the indications, hysteroscopic findings, and histopathological findings. The procedures performed – including hysteroscopic directed biopsies, polypectomies, myomectomies, and adhesiolysis – were tallied.

From the statistical point of view, each categorical variable was described by frequency and subjected to descriptive analysis using Microsoft Excel 2007.

Besides the description of the results, we tried to obtain direct information on costs associated with the procedures reported through direct interviews with staff of the HUAP’s billing department. Our attempts, however, were frustrated by the complexity of analyzing the costs of health services inputs, involving direct costs, such as the fees of doctors and other health professionals, as well as medications, and expenditures for hospitalization and other health services, and as well as indirect costs such as transportation costs and lost productivity. Furthermore, it became evident that there is a need for an efficient cost accounting information system. Given these realities, we opted to describe data obtained from the literature, and describe other potential health gains from the application of these methods of investigation of the uterine cavity.

**RESULTS**

Prior to the establishment of the outpatient hysteroscopy service in February 2011, the HUAP Gynecology Service employed transvaginal ultrasound
and exploratory uterine curettage as its diagnostic methods for evaluation the uterine cavity. Given that transvaginal ultrasonography did not permit histopathological evaluation, definitive diagnosis depended on the uterine curettage, for which there was always an enormous waiting list.

Exploratory uterine curettage required hospitalization and operating room time which competed with other more complex procedures, generating queues and delays. These factors tended to delay patients’ access to diagnostic procedures, with significant repercussions on the timing of treatment and on prognosis.

After hysteroscopy became an option for the outpatient investigation of the uterine cavity, it became the method of choice in the investigation of diseases of the uterine cavity, and exploratory uterine curettage was quickly abandoned. It is noteworthy that all patients agreed to participate in this study.

According to the HUAP Surgical Center log, obtained from the Medical Records Department, 52 exploratory uterine curettages were performed in the 36 month period from 2008 to 2010. In 2008, there were 24 uterine curettages, followed by 15 in 2009, and 13 in 2010.

The indications for uterine curettage in the 52 patients who underwent the procedure during this period were: abnormal uterine bleeding in 34 cases (65.3%), abnormal findings on a transvaginal ultrasound in 11 patients (21.2%), and other indications in three cases (5.8%). For four patients (7.7%), it was not possible to identify the indication, because the documentation was incomplete.

With regard to the characteristics of the 52 women, their ages ranged from 30 to 84 years, with a mean of 58.3 years. Thirty-four (65.4%) were post-menopausal, 17 (32.7%) still menstruating, and one medical record was incomplete. Nearly half (48.0%) of the women reported parity between one and three, ten women (19.2%) had more than three births, seven (13.5%) were nulliparous, and for the remaining 19.3%, this information was not found in the medical record.

Patients were hospitalized for the procedures, with length of stay ranging from one to 27 days, with a mean of 5.5 days. In relation to anesthesia, in the records where it was possible to obtain complete data, in 92.5% of cases the procedure was performed under general anesthesia (described as sedation), and in the remaining 7.5% of patients, spinal blocks were performed.

The histopathological findings of 52 uterine curettages were: endometrial polyps in 32.7%, endometrium without atypia in 30.8%, malignant neoplasms in 23.1% (three cases of cancer of cervix and nine cases of cancer of the uterine body), endometrial hyperplasia without atypia in 5.8%, myoma in two cases (3.8%), and inconclusive in 3.8%. In table 1, the histopathological results are presented according to clinical indication for curettage.

Of the 549 outpatient hysteroscopies performed at HUAP from February 2011 to July 2012, 63 were excluded from this analysis is because it was not possible to evaluate the uterine cavity, leaving 486 cases for analysis. The main indication for hysteroscopy was AUB in 229 cases (47.2%),

<table>
<thead>
<tr>
<th>Table 1 - Histopathologic Results of the Uterine Curettages according to Clinical Indication.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Histopathology</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Cancer*</td>
</tr>
<tr>
<td>Uterine Polyp **</td>
</tr>
<tr>
<td>Normal Endometrium</td>
</tr>
<tr>
<td>Endometrial Hyperplasia</td>
</tr>
<tr>
<td>Myoma</td>
</tr>
<tr>
<td>Inconclusive</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

* Cancer – Cervical Cancer and/or endometrium cancer
** Uterine Polyps = Endometrial polyps e/or endocervical polyps
*** Absent = the indication for the uterine curettage was not identified
followed by abnormal ultrasound findings in 187 cases (38.4%), infertility in 28 cases (5.8%) and other indications in 42 patients (8.6%).

Regarding the demographic characteristics of patients undergoing outpatient procedures, ages ranged from 17 to 90 years. In Table 2 we can observe the distribution by age group when compared to the clinical indication for the procedures. Up to 50 years the main indication for hysteroscopy was AUB. From 60 years, an abnormal finding on ultrasound was the most frequent clinical indication.

Regarding the reproductive stage of the 486 women who underwent hysteroscopy, 271 (55.8%) were in menopause and 215 (44.2%) were postmenopausal. Regarding parity, 15.4% were nulliparous, 68.5% reported one to three children, and 16.1% were multiparous (4 or more).

Based on the hysteroscopic visualization, the uterine cavity was considered normal in 67 patients, representing 13.8% of the cases. The presence of endometrial polyps was the most common finding in all age groups, observed in 226 women (46.5%).

In 77 (34.1%) of these 226 women, endocervical polyps accompanied the endometrial polyps. Twenty women had abnormal findings suspicious for malignant neoplasms or pre-cancerous lesions in the uterine cavity; all underwent directed biopsy. Uterine fibroids were observed in 13% of cases (Table 3).

Analyzing the type of findings encountered during the examination according to the clinical indication for the procedure, it was observed that, in those women referred for AUB, uterine polyps was the most frequent finding (Figure 1).

Table 2 - Number of Patients by Age Range and the Clinical Indication of the Hysteroscopy.

<table>
<thead>
<tr>
<th>Age range</th>
<th>Abnormal</th>
<th>Uterine Bleeding</th>
<th>Ultrasound</th>
<th>Infertility</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 40</td>
<td>35 (42.2)</td>
<td>16 (19.3)</td>
<td>24 (28.9)</td>
<td>8 (9.6)</td>
<td>83 (100.0)</td>
<td></td>
</tr>
<tr>
<td>40 to 50</td>
<td>104 (63.8)</td>
<td>43 (26.4)</td>
<td>4 (2.5)</td>
<td>12 (7.3)</td>
<td>163 (100.0)</td>
<td></td>
</tr>
<tr>
<td>51 to 60</td>
<td>51 (44.7)</td>
<td>53 (46.5)</td>
<td>0 (0.0)</td>
<td>10 (8.8)</td>
<td>114 (100.0)</td>
<td></td>
</tr>
<tr>
<td>&gt; 60</td>
<td>39 (31.0)</td>
<td>75 (59.5)</td>
<td>0 (0.0)</td>
<td>12 (9.5)</td>
<td>126 (100.0)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>229 (47.1)</td>
<td>187 (38.5)</td>
<td>26 (5.3)</td>
<td>44 (9.1)</td>
<td>486 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 - Frequency Distribution of Hysteroscopy Findings, according to Clinical Indication (n=486).

<table>
<thead>
<tr>
<th>Clinical Indication</th>
<th>Normal</th>
<th>Endometrial Polyp</th>
<th>Myoma</th>
<th>Endocervical Polyp</th>
<th>Suspicion of Cancer*</th>
<th>Other Findings</th>
<th>Endometrial Hypertrophy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUB</td>
<td>28(12.2)</td>
<td>91(39.7)</td>
<td>45(19.7)</td>
<td>20(8.7)</td>
<td>16(7.0)</td>
<td>16(7.0)</td>
<td>13(5.7)</td>
<td>229(100.0)</td>
</tr>
<tr>
<td>US</td>
<td>23(12.3)</td>
<td>116(62.0)</td>
<td>11(5.9)</td>
<td>12(6.4)</td>
<td>02(1.1)</td>
<td>17(9.1)</td>
<td>06(3.2)</td>
<td>187(100.0)</td>
</tr>
<tr>
<td>Infertility</td>
<td>09(32.1)</td>
<td>04(14.3)</td>
<td>05(17.9)</td>
<td>01(3.6)</td>
<td>00(0.0)</td>
<td>07(25.0)</td>
<td>02(7.2)</td>
<td>28(100.0)</td>
</tr>
<tr>
<td>Others indications</td>
<td>07(16.7)</td>
<td>15(35.7)</td>
<td>02(4.8)</td>
<td>07(16.7)</td>
<td>02(4.8)</td>
<td>09(21.4)</td>
<td>00(0.0)</td>
<td>42(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>67(13.8)</td>
<td>226(46.5)</td>
<td>63(13.0)</td>
<td>40(8.2)</td>
<td>20(4.1)</td>
<td>49(10.1)</td>
<td>21(4.3)</td>
<td>486(100.0)</td>
</tr>
</tbody>
</table>

* Suspicion of cervical cancer and/or cancer of the endometrium
A total 287 directed biopsies were performed during the 486 outpatient hysteroscopies. It was the only procedure performed in 262 patients; 25 women also underwent polypectomy or myomectomy. In 152 (31.3%) of the 486 hysteroscopies polypectomy was performed. In 56 women, hysteroscopic visualization the uterine cavity was only diagnostic, no additional procedures were required. Outpatient myomectomy was performed in 13 women, representing 2.7% of cases.

Analyzing the reason the patient was referred for the examination, it was observed that directed biopsy, followed by polypectomy, were the most frequently performed procedures in the four groups of clinical indications. Of the 486 hysteroscopies performed, there was tissue for histopathologic examination in 418 cases. Hysteroscopic findings were consistent with the histopathology findings in 84.2% of cases; in 15.7% there was disagreement. The most frequent histopathological finding was endometrial polyps and/or endocervical polyps in 59.3% of biopsies, followed a diagnosis of endometrium without atypia in 152 women (31.6%). Five cases of complex endometrial hyperplasia with atypia were reported. There were nine cases of endometrial cancer and one case of cervical cancer. Results for five biopsies (1.2%) were inconclusive. Other histopathological findings are presented in table 4.

With regard to the costs associated with diagnostic procedures of the uterine cavity in Brazil, there is insufficient research and a dearth of standardized methodologies and assessment instruments. Moreover, the challenges in obtaining data on costs makes conducting studies in this area quite difficult.\textsuperscript{1,11,12,13} In the context of university hospitals, the Ministry of Health, through its regulatory bodies, has its own fee schedule for the reimbursement of (payment for) exploratory curettage and hysteroscopy with directed biopsy.

According to this fee schedule, the hospital is paid R$ 167.42 for the uterine curettage procedure, covering the hospitalization and anesthesia, establishing one day of hospitalization as the standard, but permitting a longer stay. The reimbursement for hysteroscopy with directed biopsy is R$ 76.50.\textsuperscript{11,12,13,14}

We note that the number of professionals involved in these two procedures is different. Uterine curettage requires two physicians – an anesthesiologist and a surgeon – and one nurse in the surgical suite. Hysteroscopy, involves only one physician and a nursing professional. In an operating room, with this professional team two uterine curettages can be performed in a four-hour shift, while eight outpatient hysteroscopies are possible during the same period, provided the necessary supplies are availability. Hysteroscopy requires an initial investment in the acquisition of the equipment, as well as outlays for its maintenance, but, according to the literature, the gain in patients treated justifies the investment.\textsuperscript{15}

Based on the results obtained and the reports in the literature, one can debate and comment on issues regarding the inclusion of hysteroscopy as the method of choice for evaluating the uterine cavity, on an outpatient basis at the Antonio Pedro University Hospital.

\begin{table}[h]
\centering
\caption{Frequency Distribution of the Histopathology results of the Hysteroscopic-guided. Biopsies (n= 418).}
\begin{tabular}{ll}
\hline
Histopathology & N (\%) \\
\hline
Uterine Polyp * & 248 (59.3) \\
normal Endometrium & 132 (31.6) \\
Myoma & 14 (3.3) \\
Endometrial cancer & 9 (2.2) \\
Complex endometrial hyperplasia with atypia & 5 (1.2) \\
Simple Hyperplasia of the endometrium & 4 (1.0) \\
Cervical cancer & 1 (0.2) \\
Inconclusive & 5 (1.2) \\
Total & 418 (100.0) \\
\hline
\end{tabular}
\textsuperscript{* Uterine Polyps = Endometrial Polyps and/or Endocervical Polyps}
\end{table}
DISCUSSION

During the development of this study, there were difficulties in obtaining standardized data on the accounting of expenses associated with the two procedures. Because the health professionals involved include career civil servants and temporary contracted providers whose remuneration comes from different sources, it is extremely difficult to estimate this type of expense. With regard to the government payment for the procedures, hysteroscopy is considered an endoscopic diagnostic procedure of intermediate complexity. Although hysteroscopy also enables outpatient therapeutic procedures to be performed, these are not recognized for the purpose of remuneration in the current SUS outpatient procedure payment schedule.

Several aspects were not evaluated in this study, such as the presence of comorbidities in patients who underwent these procedures to evaluate the uterine cavity and the incidence of complications related to the procedures.

During the review the medical records of the patients who underwent uterine curettage, some records were incomplete, which hindered the collection of clinical data. When comparing the waiting time for completion of the investigation of the uterine cavity, it was noted that in 2010 patients on the waiting list for uterine curettage waited about two years. In contrast, with hysteroscopy it became possible to schedule the procedure in the HUAP gynecology outpatient clinic within 30 days of the referral. The time that the patient spent in the institution was also much greater for exploratory uterine curettage as compared with outpatient hysteroscopy: an average of 5.5 days versus 30 minutes, respectively.

For data analysis, the two principal clinical indications – for both exploratory uterine curettage and hysteroscopy – were abnormal uterine bleeding and abnormal findings on ultrasound. It appears that the most frequent histopathological result in both procedures was uterine polyp, showing the high prevalence of this disease, particularly in the cases of uterine bleeding. The high rate of malignancies found in patients undergoing uterine curettage, could suggest that this procedure was performed more often in more advanced cases where the lesion already involved much of the uterine cavity, as curettage typically does not exhibit good sensitivity for focal lesions. Moreover, it can be seen that there was a progressive increase in the number of patients treated the outpatient hysteroscopy service was established. Under the direct visualization of hysteroscopy, there was newfound agility and accuracy in the diagnosis; this dramatically improved the therapeutic management and eliminated the queues of patients waiting for uterine curettage.

Hospitalization were avoided for investigation of the uterine cavity by exploratory uterine curettage, allowing beds and operating room schedules to be used for high complexity cases such as gynecological cancer. There was an associated reduction of morbidity reflecting the avoided hospitalization and general anesthesia. There was better use of the surgical center professionals who were about to devote more of their time to higher complexity cases.

With therapeutic polypectomies and myomectomies performed during the hysteroscopy, the outpatient procedure was considered definitive in more than 30% of cases. Symptoms improved, avoiding the loss of productivity, and reducing the period of absence of these patients from work and family environments.

Another benefit – in the university hospital setting – is the opportunity to teach examination techniques such as hysteroscopy to medical students and medical residents. By transmitting and recording images of the direct and detailed visualization of the uterine cavity – which is not possible in curettage which is performed blindly – students and trainees get to see various gynecological pathologies. The development of a digital image database which also maps the location of the lesions, enables the histopathology to be compared to what was observed hysteroscopically. It becomes possible to teach and train residents the technical nuances of hysteroscopy in stages, initially with diagnostic maneuvers performed with the hysteroscope within the uterine cavity, gradually evolving to the performance of the entire procedure, always under the supervision of faculty instructors. In this way, it is possible to make more precise assessments of the skills acquired by the trainees in the investigation of the uterine cavity, distinct from exploratory uterine curettage, where the evaluation is more subjective.

The emergence of new technologies in the medical field involves investments and costs, but can bring benefits which can be appreciated by observing the impact on patient care, teaching and research. With hysteroscopy implemented at HUAP, it is possible to
serve a greater number of patients with accurate and safe diagnoses in a shorter period of time. The data obtained in reports in the literature point to hysteroscopy as the method of choice in the outpatient investigation and treatment of disorders of the uterine cavity.

According to randomized controlled trials conducted in the United Kingdom, patients who underwent hysteroscopy as outpatients compared with those who underwent the procedure under regimes of “same day” hospitalization, returned more quickly to work and domestic activities. In addition, there was a reduction in direct costs per patient in the outpatient group, and separate hospitalizations for surgical hysteroscopy were avoided in 30% of cases.15-17

CONCLUSION

Establishing the outpatient hysteroscopy service at the Antonio Pedro University Hospital had a very positive impact on patient care and on the instruction of students and residents of the gynecology service.

REFERENCES


17. Saridogan E, Tilden D, Sykes D, Davis N, Subramanian D. Cost-analysis comparison of outpatient see-and-treat hysteroscopy service with other hysteroscopy service models. JMIG 2010; 17: 518-525. DOI:10.1016/j.jmig.2010.03.009

Correspondence Address:
CLAUDIA BAPTISTA PILLAR
Rua Marquês de Paraná, 303, Centro – Niterói (RJ)
Rua Presidente Backer, 337/702 – Icaraí - Niterói (RJ)
Tel.: (021) 2611-7406/ 8723-3155
E-mail: pillargiordano@uol.com.br

RICARDO BASSIL LASMAR
Rua Marquês de Paraná, 303, Centro – Niterói (RJ)
E-mail: ricardo@lasmar.com.br