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ORIGINAL ARTICLE

## Prevalence of uterine diseases in healthy women with hysteroscopy as part of routine gynecological evaluation



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### KEYWORDS

Hysteroscopy;  
Regular gynecological  
examination;  
Uterine pathology

### Abstract

**Background:** Hysteroscopy is a clinical procedure that allows a gynecologist to see inside the uterus through endoscopy. This can be done for diagnosis or treatment of intrauterine conditions and as a method of surgery.

**Purpose:** To establish the prevalence of uterine disease in a group of healthy patients who underwent hysteroscopy as part of their gynecological examination.

**Materials and methods:** It was an observational study. 18 patients who attended a regular consultation provided by the clinical services of Gynecology and Obstetrics of the General Hospital Pemex Picacho were studied; a hysteroscopy was performed in 7 (38.8%) patients who only attended a usual gynecological examination, were asymptomatic and were without known gynecological pathology.

**Results:** When performing hysteroscopy, 6 (85.7%) patients with gynecological pathology not previously known were found. The disease most commonly found in this sample was the internal cervical stenosis (28.5%).

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**PALABRAS CLAVE**

Histeroscopia;  
Examen ginecológico  
habitual;  
Patologías uterinas

**Conclusiones:** Hysteroscopy showed a high prevalence of detecting uterine pathologies that were never previously described in a population of healthy women in a common sample of patients attending the outpatient Hospital Pemex Picacho.

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## Prevalencia de patologías uterinas en mujeres sanas con histeroscopia como parte de evaluación ginecológica habitual

**Resumen**

**Antecedentes:** La histeroscopia es un procedimiento clínico que le permite a un ginecólogo ver el interior del útero por medio de una endoscopia. Este procedimiento puede realizarse con fines de diagnóstico o para tratamientos de patologías intrauterinas y como método de intervención quirúrgica.

**Objetivo:** Establecer la prevalencia de enfermedades uterinas en un grupo de pacientes sanas que se les realiza una histeroscopia como parte de su revisión ginecológica.

**Material y métodos:** Estudio experimental, observacional, se estudiaron a 18 pacientes que acudieron a una consulta habitual por parte del servicio de Ginecología y Obstetricia del Hospital General de Pemex Picacho, se realizó histeroscopia a 7 (38.8%) pacientes que solo acudieron a revisión ginecológica habitual, asintomáticas y sin patología ginecológica conocida.

**Resultados:** Al realizar una histeroscopia se encontró a 6 (85.7%) pacientes con patología ginecológica antes no conocida. La patología más frecuentemente encontrada en esta muestra fue la de estenosis cervical interna (28.5%).

**Conclusiones:** La histeroscopia mostro una alta prevalencia de detección de patologías uterinas nunca previamente descrita en una población de mujeres sanas dentro de una muestra habitual de pacientes que acuden a consulta externa del Hospital Pemex Picacho.

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**Background**

Hysteroscopy is a clinical procedure that allows gynecologist to perform an exploration of the uterine cavity through an endoscopy. This can be done for diagnosis or treatment of diseases and as an intrauterine surgery method. First developed in 1865, the first operation performed with a hysteroscope was the removal of uterine polyps in 1869.<sup>1-3</sup>

The hysteroscope has an optical system, usually connected to a VCR and is luminogenic, with transmission by optical fibers. The gynecologist inserts a lens to view the inside of the uterus; this lens you may connect to a camera to view the image on a monitor. The camera, in turn, can be connected to a VCR, DVD recorder or other recording device video.<sup>4-8</sup>

Saline, sorbitol or dextrose solution or carbon dioxide is used to distend the uterine cavity; currently, a physiological solution is most often used. After cervical expansion, hysteroscope is guided into the uterine cavity for inspection. If abnormalities are found, it proceeds with the channel of the hysteroscope where you can introduce specialized surgical instruments, such as scissors, tweezers and bipolar electrodes, to operate in the cavity uterina.<sup>9-12</sup>

Previously, an intervention by hysteroscopy was always performed under general anesthesia, whereas diagnostic

hysteroscopy using smaller caliber instruments and being non-invasive was performed without anesthesia. However, nowadays, small diameter (3 mm) hysteroscopes have been developed to allow interventions in the query without the need for anesthesia, with a total duration of the procedure no more than twenty minutes.<sup>13-25</sup>

**Primary objective**

To establish the prevalence of uterine disease in a sample of healthy patients who underwent a hysteroscopy as part of a gynecological examination.

**Specific objectives**

1. To determine uterine pathology most frequently found in a group of healthy patients.
2. To determine the correlation between age and degree of referred pain in hysteroscopy.
3. To determine the correlation between the degree of pain in healthy patients undergoing hysteroscopy with the time taken by the procedure.

**Table 1** Distribution of uterine diseases discovered by hysteroscopy in a sample of healthy women.

Patient	Age	Reference diagnostic	Hysteroscopic diagnostic	Pain grade	Duration of hysteroscopy (min)
1	46	Control	Bicornual uterus	6	14
2	65	Control	Bicornual uterus	6	12
3	58	Control	Endocervical polyp	10	23
4	24	Control	Stenosis of intern cervical orifice	7	13
5	31	Control	Right cornual leukoplakia	5	24
6	43	Control	Two myomas of 5 mm	8.5	34
7	46	Control	Stenosis of intern cervical orifice	5	12
8	48	Control	Normal	10	10
9	36	Control	Right occluded ostium, left with endometrial tissue.	0	8
10	62	Control	Occlusion cervical atrophy	8	11
11	61	Control	Stenosis of intern cervical orifice	5	14
12	47	Control	Stenosis of intern cervical orifice	2	17
13	36	Control	Normal	8	12
14	31	Control	Left occluded ostium	2	14
15	55	Control	Stenosis of intern cervical orifice	5	18
16	51	Control	Normal	1	15
17	48	Control	Stenosis of intern cervical orifice	5	15
18	27	Control	Asherman's syndrome	10	13

## Materials and methods

It is an observational, descriptive and cross-sectional pilot study. 18 patients attending a regular consultation provided by the clinical services of Gynecology and Obstetrics General Hospital Pemex Picacho, asymptomatic and without known gynecological pathology were studied.

**Selection criteria:** Women over 18 years, with active sexual life and without any known uterine pathology based on a previous ultrasonography.

**Exclusion criteria:** Women who have undergone surgical events affecting the uterine structure as curettage, diagnostic hysteroscopies, cesarean section, myomectomy and tubal occlusion.

## Results

The age range varied from 24 to 65 years and the average age was 48.1 and the standard deviation was 18.6. When performing a hysteroscopy in the clinic without sedation, experts found 15 (83.3%) patients with gynecological pathology not previously known (Table 1).

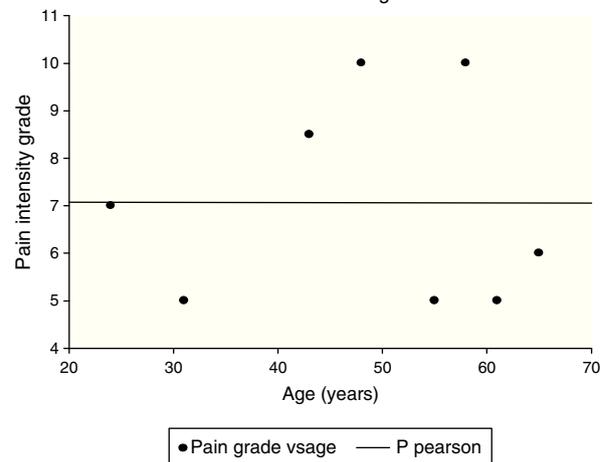
Uterine diseases most frequently encountered in these patients are described. The disease most commonly found in this sample was the internal cervical stenosis in 6 patients (33.3%).

Pearson test was performed to correlate ages of healthy women with the degree of pain expressed according to a visual analog scale  $R = -0.002$  finding and  $P > 0.05$  (Graph 1).

A  $P$ -Pearson test was performed to establish the correlation between the degree of pain in healthy women undergoing hysteroscopy and time taken to perform the procedure finding an  $R = 0.20$  with a  $P > 0.05$  (Graph 2).

The prevalence of uterine pathology found in a sample of healthy patients was 83.3% (Graph 3).

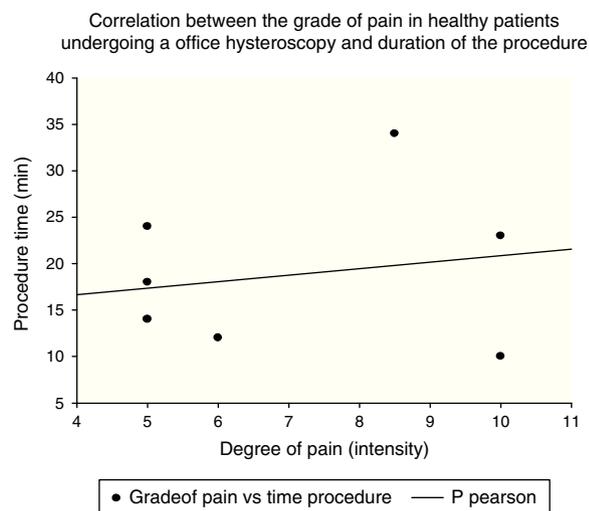
Correlation between the ages of women and the grade of pain referred to in a visual analog scale



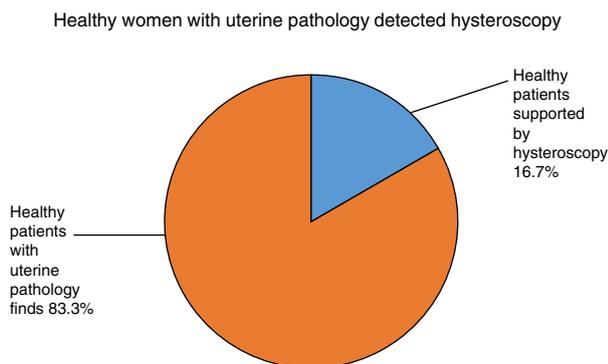
**Graph 1** Correlation between the ages of women and the grade of pain referred to in a visual analog scale.

## Discussion

In 2012, Alanis Fuentes and colleagues published a causality detection of abnormal uterine bleeding in a group of study of 1,482 women without a clear diagnosis. In 2013, Sanchez and colleagues identified a diagnostic concordance in the diagnosis of uterine infertility in women when compared with hysterosonography and hysterosalpingography, with greater functionality to establish causality of uterine infertility. Hysteroscopy is considered only as a diagnostic tool for diseases previously diagnosed by clinical or imaging studies; however, in women who are asymptomatic and are considered healthy, uterine pathology requiring treatment can be found



**Graph 2** Correlation between the grade of pain in healthy patients undergoing an office hysteroscopy and duration of the procedure.



**Graph 3** Healthy women with uterine pathology detected by hysteroscopy.

in our study in about 83% of the patients; patients who underwent hysteroscopy incidentally diagnosed a condition that would warrant possibly treatment. So, it should be a tool to be incorporated into routine clinical evaluation of care in gynecological patients. As for the correlation between the degree of pain and age, an inversely proportional relationship but with very weak association was found. During this study, a direct relationship was observed, but it was not significant. These last two results are due to the sample size; you must increase the number of participants to make clear if the strength of association is significant.

## Conclusions

Hysteroscopy showed a high prevalence of detection of uterine pathologies never previously described in a population of healthy women in a typical sample of patients attending outpatient Hospital Pemex Picacho.

## Ethical disclosure

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that no patient data appear in this article.

**Right to privacy and informed consent.** The authors declare that no patient data appear in this article.

## Conflict of interest

The authors declare that they have no conflict of interests.

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