

International Congress
ENDOCRINE DISRUPTORS:
Endometriosis and Infertility

***“ Clinco - epidemiological
study on cohort of
endometriosis patients”***

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ENDOMETRIOSIS

How old is the disease?

Theoretically, endometriosis should have existed since the beginning of time. However, the first description was about 300 years ago (1690 Dr. Daniel Shroen) and the first detailed description was in 1860 by a physician named Von Rokitansky

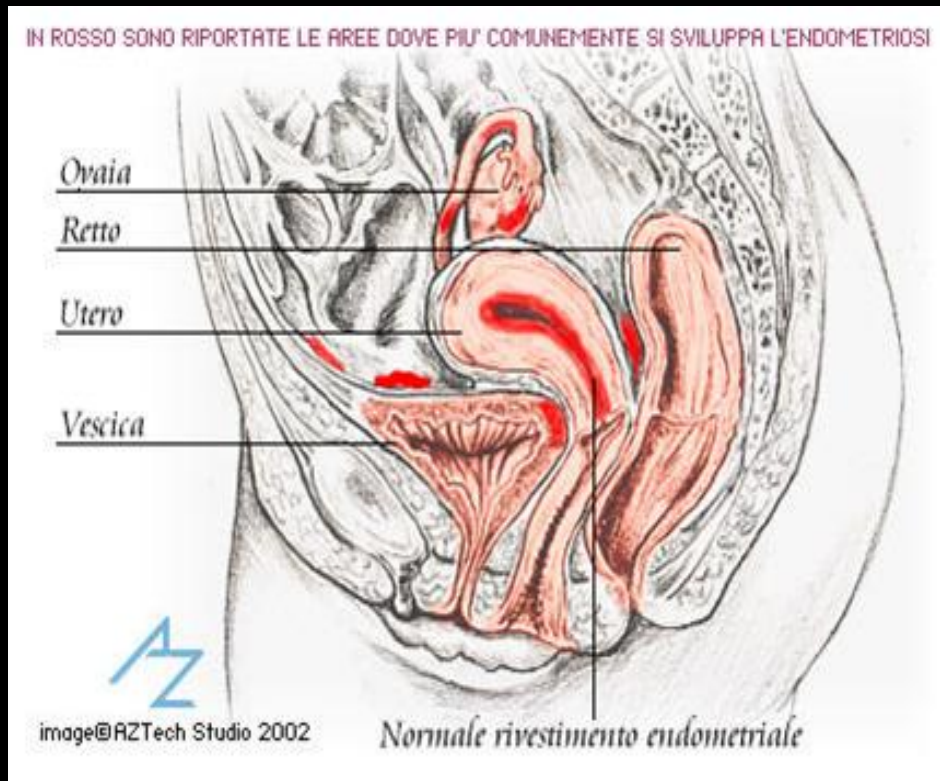
*Shroen D. Disputatio Inaguralis Medica de Ulceribus Ulceri recorded .
Von Rokitansky C . Ueber uterusdrüsen—neubildung in uterus- und ovarial-sarcomen
Ztsch K K Gesellsch der Aerzte zu Wien 1860;37:577-81.*

Our modern-day understanding of endometriosis began with the pioneering efforts of a private physician named Sampson , New York, in the 1920s Dr. Sampson proposed that the menstrual backflow through the tubes contained viable endometrial cells which could be transplanted to ectopic sites.

*How old is endometriosis? Late 17th- and 18th- century European description of the disease.
Knapp VJ, Fertil Steril. 2000 Jan .*

PELVIC ENDOMETRIOSIS

THE COMMONEST SITES FOR ENDOMETRIAL IMPLANTATION



Ovary **30 - 75%**

Anterior cul-de-sac **35%**

Pouch of Douglas **70%**

Uterosacral ligament **18 - 35%**

Uterus **10%**

Fallopian tube **6 - 20%**

GI involvement **3 - 37%**
(sigmoid colon, rectum, appendix)

Urinary tract **1%**

Distribuzione pelvica dell'endometriosi

Bibliografia 1

1 Rev Med Chir Soc Med Nat Iasi. 2009 Jul-Sep;113(3):799-802.

Clinical and paraclinical diagnosis of pelvic endometriosis. Clinical study

[Article in Romanian]

[Socolov R](#), [Buțureanu S](#), [Sindilar A](#), [Luchian A](#), [Marcus S](#), [Cozma L](#).

Facultatea de Medicină, Departamentul de Obstetrică Ginecologie, Universitatea de Medicină și Farmacie "Gr.T. Popa" Iași

2 J Radiol. 2008 Nov;89(11 Pt 1):1745-54.

MR imaging features of deep pelvic endometriosis: correlation with laparoscopy

[Article in French]

[Jarlot C](#), [Anglade E](#), [Paillocher N](#), [Moreau D](#), [Catala L](#), [Aubé C](#).

Département de Radiologie, CHU d'Angers, 4 rue Larrey, 49033 Angers Cedex 01, France.
crous@hotmail.fr

3 World J Gastroenterol. 2008 Jun 7;14(21):3430-4.

Acute small bowel obstruction caused by endometriosis: a case report and review of the literature.

[De Ceglie A](#), [Bilardi C](#), [Blanchi S](#), [Picasso M](#), [Di Muzio M](#), [Trimarchi A](#), [Conio M](#).

Department of Gastroenterology, General Hospital, C.so Garibaldi 187/3, Sanremo 18038, Italy.

Distribuzione pelvica dell'endometriosi

Bibliografia 2

4 Fertil Steril. 2008 Jun;89(6):1632-6. Epub 2007 Jul 26.

Using location, color, size, and depth to characterize and identify endometriosis lesions in a cohort of 133 women.

[Stegmann BJ](#), [Sinaii N](#), [Liu S](#), [Segars J](#), [Merino M](#), [Nieman LK](#), [Stratton P](#).

Reproductive Biology and Medicine Branch, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Maryland 20892-1109, USA.

5 Radiology. 2004 Aug;232(2):379-89. Epub 2004 Jun 17.

Deep pelvic endometriosis: MR imaging for diagnosis and prediction of extension of disease.

[Bazot M](#), [Darai E](#), [Hourani R](#), [Thomassin I](#), [Cortez A](#), [Uzan S](#), [Buy JN](#).

Department of Radiology, Hôpital Tenon, Assistance Publique-Hôpitaux de Paris, 4 rue de la Chine, Paris 75020, France. marc.bazot@tnn.ap-hop-paris.fr

6 Hum Reprod. 1999 Apr;14(4):1080-6.

Magnetic resonance imaging characteristics of deep endometriosis.

[Kinkel K](#), [Chapron C](#), [Balleyguier C](#), [Fritel X](#), [Dubuisson JB](#), [Moreau JF](#).

Department of Radiology, Hopital Necker, Paris, France.

IDEA !!!

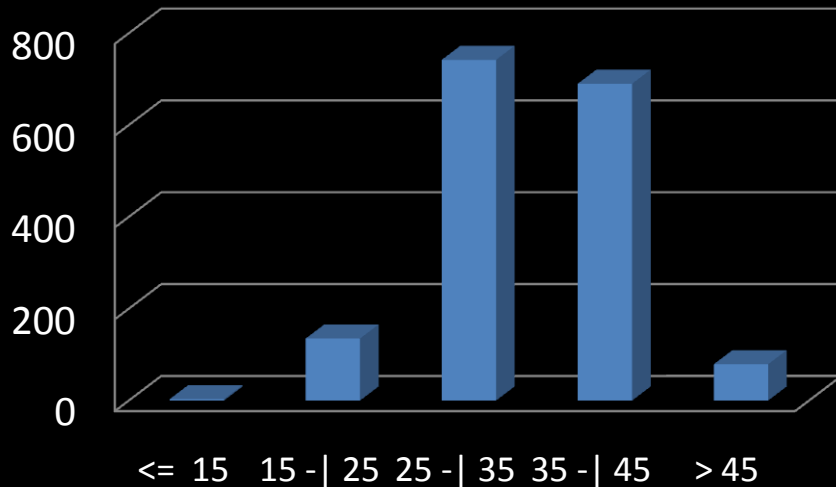
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epidemiological study
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patients”***



" Clinco - epidemiological study on cohort of endometriosis patients"

MATERIALI E METODI

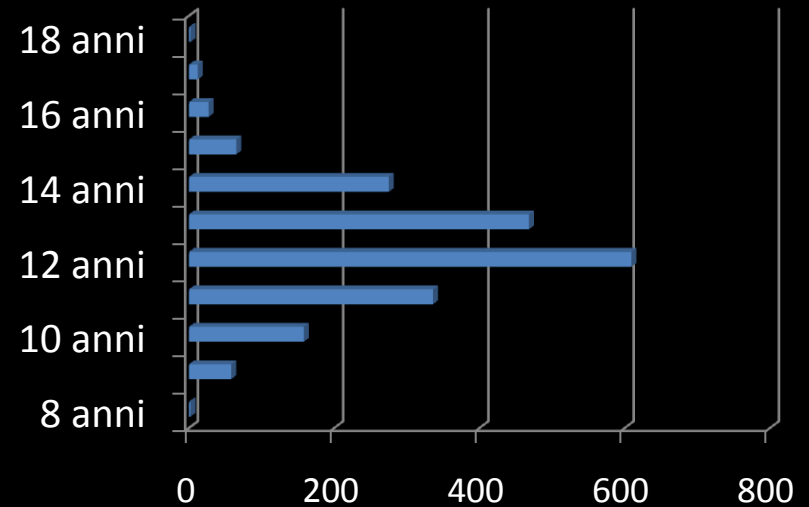
Pazienti per classi di età



N° pazienti:

2272

Pazienti per età al menarca



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MATERIALI E METODI

"American Fertility Society Revised American Fertility Society classification of endometriosis".
Fertil. Steril 1985

STADIAZIONE
 Punteggio medio



74,19

**THE AMERICAN FERTILITY SOCIETY
 REVISED CLASSIFICATION OF ENDOMETRIOSIS**

Patient's Name _____ Date _____
 Stage I (Minimal) - 1-5 Laparoscopy _____ Laparotomy _____ Photography _____
 Stage II (Mild) - 6-15 Recommended Treatment _____
 Stage III (Moderate) - 16-40 Prognosis _____
 Stage IV (Severe) - >40
 Total _____

PERITONEUM	ENDOMETRIOSIS	Distance		
		<1cm	1-5cm	>5cm
	Superficial	1	2	4
	Deep	2	4	6
OVARY	R. Superficial	1	2	4
	Deep	4	16	20
	L. Superficial	1	2	4
	Deep	4	16	20

POSTERIOR CULDESAC OBSTRUCTION	Degree	
	Partial	Complete
	4	40

OVARY	ADHESIONS	Enclosure		
		< 1/3 Enclosure	1/3-2/3 Enclosure	> 2/3 Enclosure
	R. filmy	1	2	4
	Dense	4	8	16
	L. filmy	1	2	4
	Dense	4	8	16

TUBE	ADHESIONS	Enclosure		
		< 1/3 Enclosure	1/3-2/3 Enclosure	> 2/3 Enclosure
	R. filmy	1	2	4
	Dense	4*	8*	16
	L. filmy	1	2	4
	Dense	4*	8*	16

*If the fimbriated end of the fallopian tube is completely enclosed, change the point assignment to 16.

Additional Endometriosis: _____ Associated Pathology: _____

To Be Used with Normal
Tubes and Ovaries

To Be Used with Abnormal
Tubes and/or Ovaries

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MATERIALI E METODI

PROTOCOLLO NON INVASIVO

**Marcatori biumorali
Ca 19.9 e Ca 125**

**Esame bimanuale
vaginale-rettale**

**Risonanza Magnetica
della pelvi con m.d.c.**



PROTOCOLLO INVASIVO

**Laparoscopia
diagnostico-
operativa**

**Esame
istopatologico
dei prelievi tissutali**

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RISULTATI

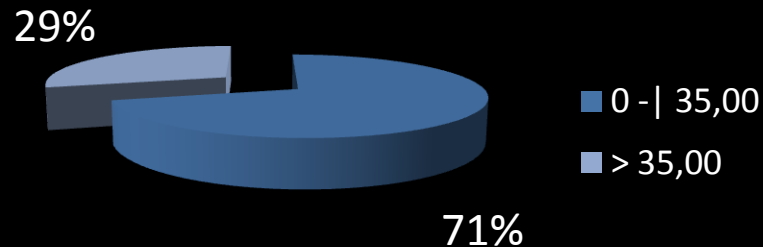


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Tot. Pz. = 2272

Ca125_U_ml	Numero pazienti	%
0 - 35,00	1607	70,73%
> 35,00	665	29,27%

Pazienti per Ca125_U_ml



Arch Gynecol Obstet. 2005 Jan;271(1):40-5. Epub 2004 Jul 9.

High concentrations of the CA-125, CA 19-9 and CA 15-3 in the peritoneal fluid between patients with and without endometriosis.

Matalliotakis IM, Goumenou AG, Mulayim N, Karkavitsas N, Koumantakis EE.

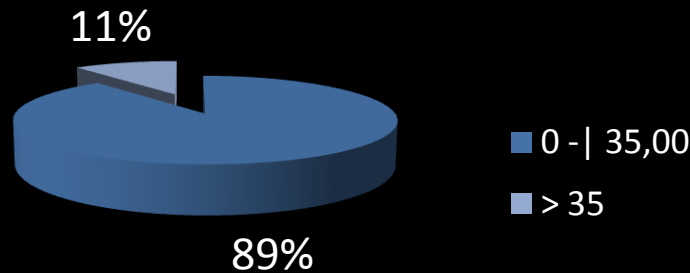
Department of Obstetrics and Gynecology, University of Crete, P.O. Box 1393, 714-9 Heraklion, Crete, Greece.

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Tot. Pz. = 2272

Ca19_9_U_ml	Numero pazienti	%
0 - 35,00	2030	89,35%
> 35	242	10,65%

Pazienti per Ca19_9_U_ml



Arch Gynecol Obstet. 2005 Jan;271(1):40-5. Epub 2004 Jul 9.

High concentrations of the CA-125, CA 19-9 and CA 15-3 in the peritoneal fluid between patients with and without endometriosis.

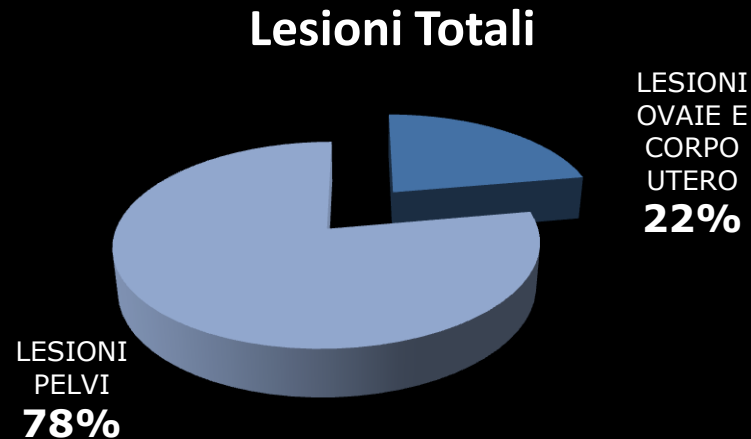
Matalliotakis IM, Goumenou AG, Mulayim N, Karkavitsas N, Koumantakis EE.

Department of Obstetrics and Gynecology, University of Crete, P.O. Box 1393, 714-9 Heraklion, Crete, Greece.

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**Tot. lesioni = 6372
(tot. pz. 2272)**

Lesioni Totali	Numero pazienti	%
LESIONI OVAIE E CORPO UTERO	1416	22,22%
LESIONI PELVI	4956	77,78%

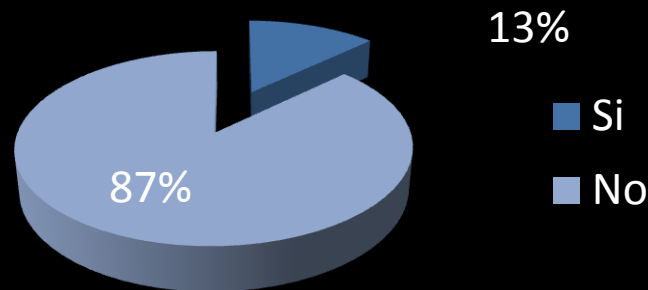


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Fornice laterale destro	Numero pazienti	%
Si	293	12,90%
No	1979	87,10%

Fornice laterale destro

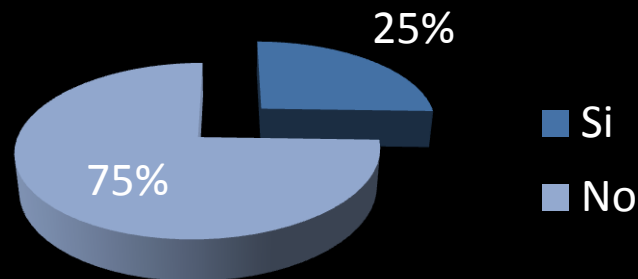


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Tot. Pz. = 2272

Fornice laterale sinistro	Numero pazienti	%
Si	579	25,48%
No	1693	74,52%

Fornice laterale sinistro

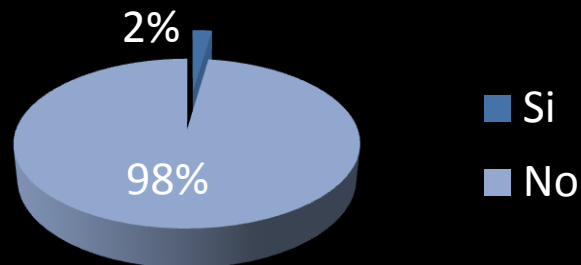


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Fornice laterale anteriore	Numero pazienti	%
Si	52	2,29%
No	2220	97,71%

Fornice laterale anteriore

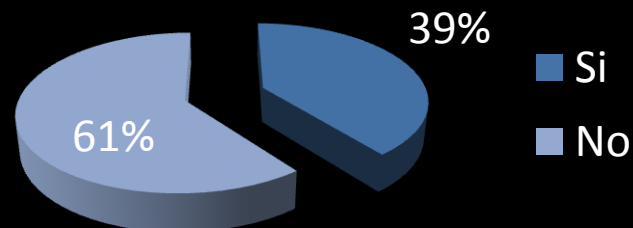


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Fornice laterale posteriore	Numero pazienti	%
Si	896	39,44%
No	1376	60,56%

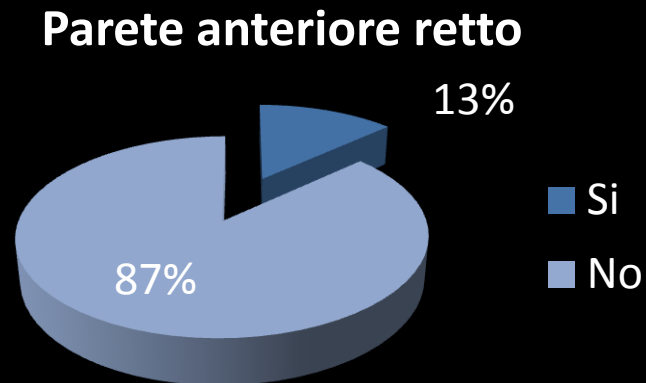
Fornice laterale posteriore



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Parete anteriore retto	Numero pazienti	%
Si	300	13,20%
No	1972	86,80%

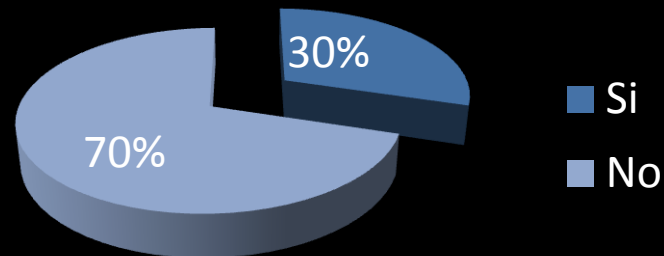


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Tot. Pz. = 2272

Setto retto vaginale	Numero pazienti	%
Si	675	29,71%
No	1597	70,29%

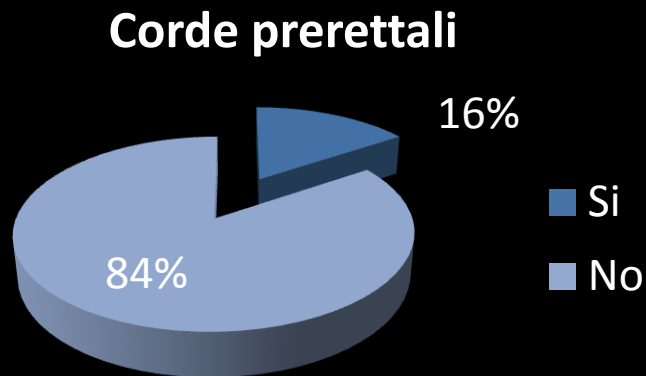
Setto retto vaginale



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Corde prerettali	Numero pazienti	%
Si	354	15,58%
No	1918	84,42%

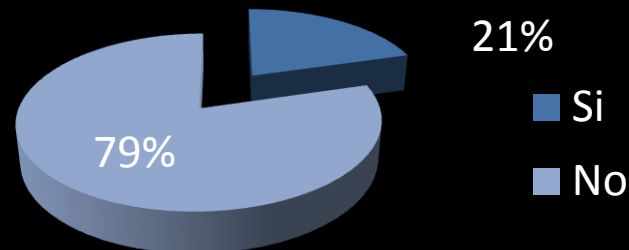


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Legamento utero-sacrale destro	Numero pazienti	%
Si	466	20,51%
No	1806	79,49%

**Legamento utero-sacrale
destro**

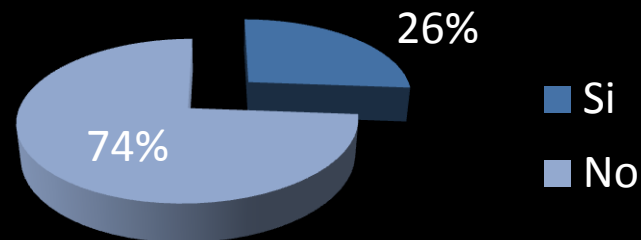


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Tot. Pz. = 2272

Legamento utero-sacrale sinistro	Numero pazienti	%
Si	595	26,19%
No	1677	73,81%

**Legamento utero-sacrale
sinistro**

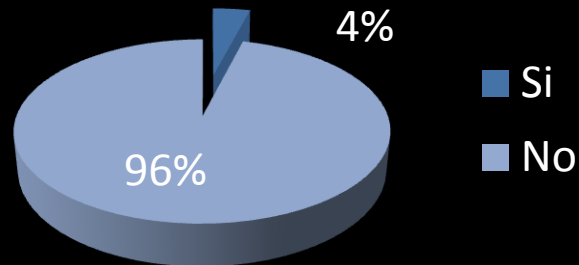


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Parametrio laterale destro	Numero pazienti	%
Si	91	4,01%
No	2181	95,99%

Parametrio laterale destro

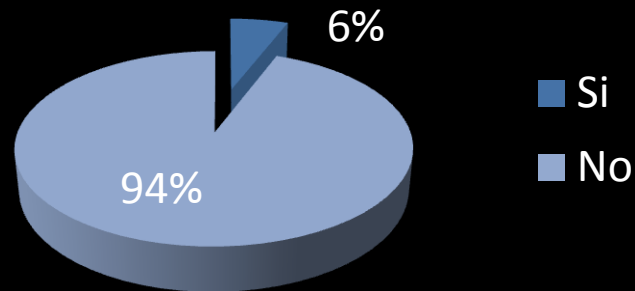


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Parametrio laterale sinistro	Numero pazienti	%
Si	133	5,85%
No	2139	94,15%

Parametrio laterale sinistro

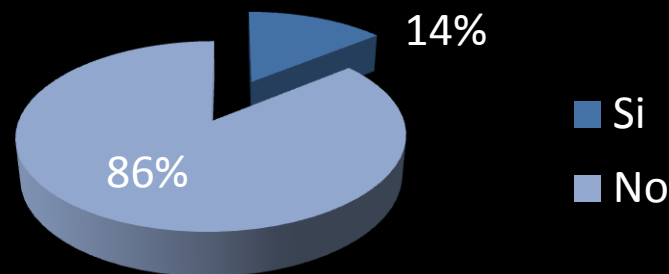


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Tot. Pz. = 2272

Peritoneo superficiale e profondo	Numero pazienti	%
Si	322	14,17%
No	1959	86,22%

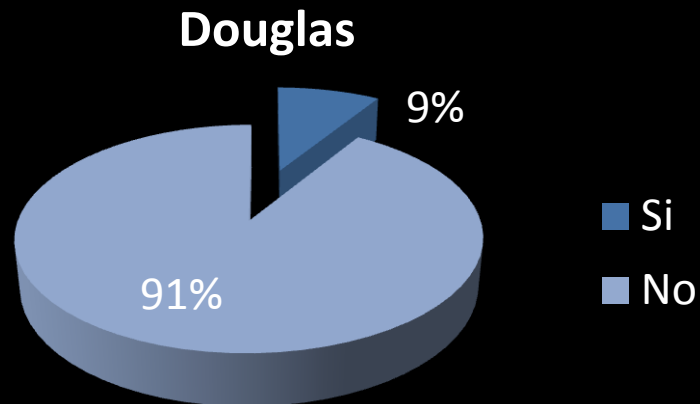
Peritoneo superficiale e profondo



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Tot. Pz. = 2272

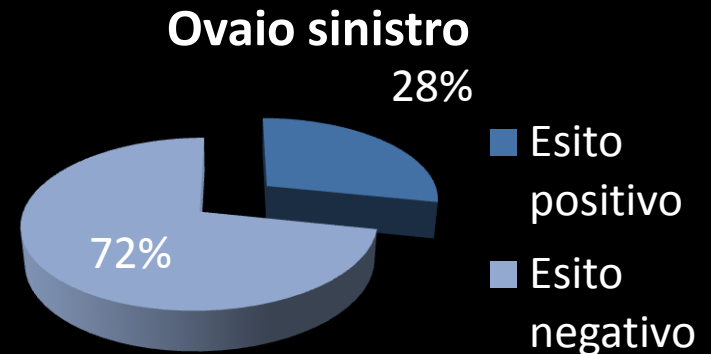
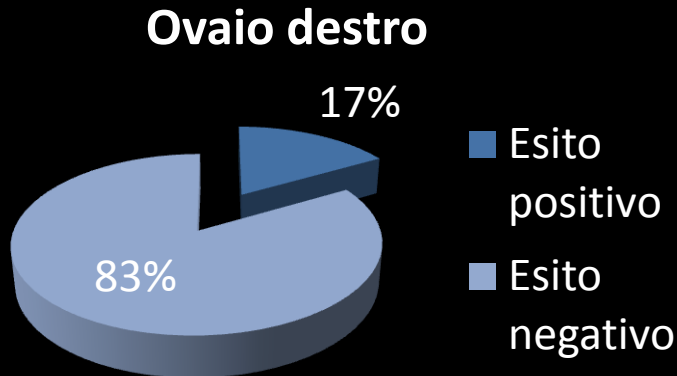
Douglas	Numero pazienti	%
Si	200	8,80%
No	2072	91,20%



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Tot. Pz. = 2146

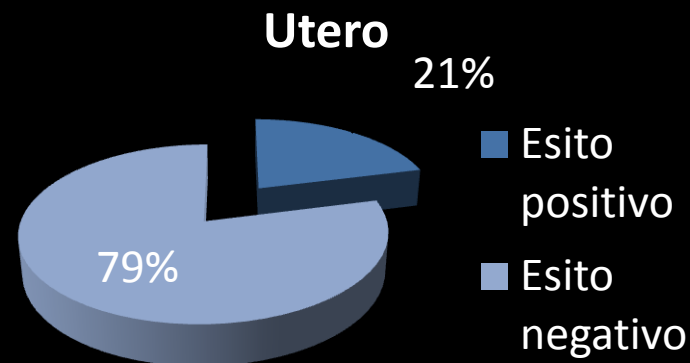
Ovaio destro	Numero pazienti	%	Ovaio sinistro	Numero pazienti	%
Esito positivo	358	16,68%	Esito positivo	606	28,24%
Esito negativo	1788	83,32%	Esito negativo	1540	71,76%



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Tot. Pz. = 2146

Utero	Numero pazienti	%
Esito positivo	452	21,06%
Esito negativo	1694	78,94%



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CONCLUSIONI 1

-  I marcatori non hanno un elevato indice di affidabilità
-  L'assenza di malattia ovarica non esclude l' endometriosi
-  Il protocollo diagnostico terapeutico deve essere applicato in modo completo in tutti i suoi steps

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CONCLUSIONI 2

- ➔ La persistenza di sintomi tipici a protocollo non invasivo negativo deve imporre test farmacologici di soppressione (analoghi del GnRh) prima di passare alla parte invasiva del protocollo per non cronicizzare una eventuale malattia nel paziente
- ➔ L'endometriosi pelvica profonda è molto più frequente di quella ovarica (77,78% vs 22,22%)