



Università degli Studi di Padova  
Dipartimento di Scienze Ginecologiche e della Riproduzione Umana  
Scuola di Specializzazione in Ginecologia e Ostetricia  
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# ***UTERO SETTO: MANAGEMENT ED OUTCOME RIPRODUTTIVO POST METROPLASTICA***

*Dott.ssa A. Dalla Toffola*

## CASO CLINICO

T.C., ♀, 39 anni, gravida a 38 s.g.:

- ✓ AN. FAMILIARE: familiarità per cardiopatia
- ✓ AN. FISIOLÓGICA: fumatrice di 20 sigarette/die
- ✓ AN. PATOLOGICA REMOTA:
  - ❖ 3 RCU per aborto spontaneo nel 2008, 2009 e 2011
  - ❖ 2010 LPS: asportazione di cisti dermoide ovaio destro e cromosalpingoscopia con pronto passaggio di blu di metilene da entrambe le tube; all'ispezione addomino-pelvica l'utero risulta regolare per forma e morfologia
  - ❖ 2012 approfondimenti diagnostici ecografici ed isteroscopici per poliabortività pongono il sospetto di subsetto uterino
  - ❖ 2012 HSC operativa: metroplastica per subsetto uterino occupante un terzo della cavità. Con Versapoint si è proceduto a sezione del setto fibroso.
  - ❖ Portatrice del fattore MTHFR in omozigosi

## CASO CLINICO

✓ AN. OSTETRICA:

PARA 0030 per 3 aborti spontanei ad 8 s.g. + RCU nel 2008, 2009 e 2011

✓ GRAVIDANZA insorta spontaneamente, riferita normodecorsa.

 Assistenza a parto indotto in gravida a 38 s.g. 

# UTERO SETTO

**Malformazione uterina derivante dal mancato o incompleto riassorbimento del setto mediano che separa le emicavit  originatesi dai dotti di M ller .**

L'**incidenza** nella popolazione generale   stimata intorno al 2-3%.

Rappresenta la **pi  frequente malformazione uterina** (35%)

*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis.  
J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

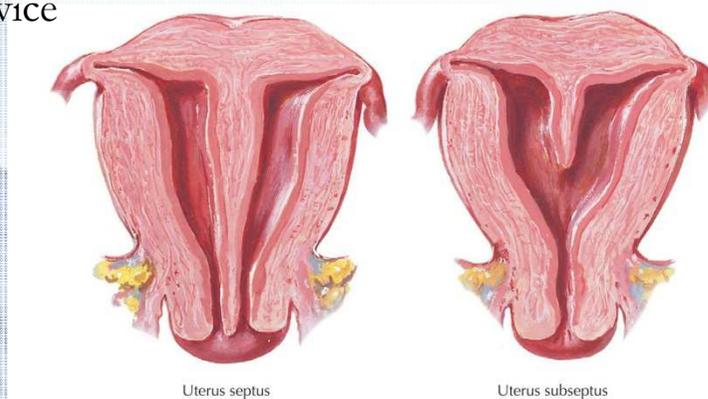
# UTERO SETTO

- ✓ L'utero presenta una morfologia normale al controllo laparoscopico, con fondo convesso talora segnato al centro da un solco leggero.
- ✓ Internamente è presente un setto costituito da tessuto fibromuscolare scarsamente vascolarizzato, localizzato nella parte centrale della regione fundica e che si estende per almeno il 50% dello spessore della parete uterina.

## ✓ Il setto può essere:

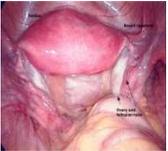
- ✓ **Completo** se la cavità uterina viene divisa completamente estendendosi fino alla cervice (30-35%)

- ✓ **Parziale** se la cavità uterina risulta divisa solo parzialmente (utero subsetto) (65-70%)



# DIAGNOSI

**Dato che la maggior parte delle donne non presenta anomalie dei genitali esterni, la diagnosi si pone dopo il menarca o in corso di accertamenti per infertilità o aborto.**

<p>Isteroscopia + laparoscopia Sonoisterosalpingografia Ecografia tridimensionale</p>		<p>Indagini dotate di accuratezza nella diagnosi e classificazione di anomalie uterine &gt; 90%</p>
<p>Solo isteroscopia</p>		<p>Indagine dotata di elevata accuratezza &gt; 90% ma non in grado di differenziare tra utero setto e bicorni <i>Criteria Bettocchi 2007</i></p>
<p>Isterosalpingografia Ecografia</p>		<p>Indagine con accuratezza &lt; 90%</p>
<p>RMN</p>		<p>Indagine di secondo livello riservato ai casi dubbi dotata di sensibilità del 100%</p>

*Saravelos SH, Cocksedge KA, Li TC. Prevalence and diagnosis of congenital uterine anomalies in women with reproductive failure: a critical appraisal. Hum Reprod Update. 2008 Sep-Oct;14(5):415-29.*

# IMPLICAZIONI NELLA FERTILITA' E NELL'OSTETRICIA

Problematiche ostetriche	<b>Aborti ricorrenti</b> Presentazione podalica (25-30%) o trasversa (5%) Parto pretermine (20%) Rottura prematura delle membrane Taglio cesareo
Post partum	Residui placentari (5-10%)
Infertilità primaria	Ruolo controverso

*Homer HA, Li TC, Cooke ID. The septate uterus: a review of management and reproductive outcome. Fertil Steril. 2000 Jan;73(1):1-14. Review.*

# IMPLICAZIONI NELLA FERTILITA' E NELL'OSTETRICIA

## ABORTI RICORRENTI (tra 8-16 s.g.)

- ✓ Diminuito spazio luminale
- ✓ Inappropriato sviluppo dell'endometrio che non supporta la gravidanza

Questi fattori possono agire in sinergia associandosi al fattore più importante ossia

➔ La diminuita vascolarizzazione del tessuto a livello del setto

## PARTO PRETERMINE

- ✓ Aumentata pressione intrauterina associata ad incontinenza cervicale
- ✓ La riduzione dei recettori per progesterone può comportare ipercontrattilità

## INFERTILITA' PRIMARIA

- ✓ Il ruolo dell'utero setto nell'infertilità primaria risulta controverso e spesso è utile indagare cause intra ed extrauterine di infertilità

# INDICAZIONI ALLA METROPLASTICA

- ❖ *L'indicazione più appropriata è l'aborto ricorrente.*

## **Metroplasty versus expectant management for women with recurrent miscarriage and a septate uterus**

C R Kowalik<sup>1</sup>, M Goddijn<sup>2</sup>, M H Emanuel<sup>3</sup>, M Y Bongers<sup>4</sup>, T Spinder<sup>5</sup>, J H de Kruijff<sup>6</sup>, Ben Willem J Mol<sup>7</sup>, Maas Jan Heineman<sup>8</sup>

**Editorial group:** Cochrane Menstrual Disorders and Subfertility Group.

**Publication status and date:** New, published in Issue 6, 2011.

**Review content assessed as up-to-date:** 12 April 2011.

Hysteroscopic metroplasty in women with recurrent miscarriage and a septate uterus is being performed in many countries to improve reproductive outcomes in women. This treatment has been assessed in non-controlled studies, which suggested a positive effect on pregnancy outcomes.

Recurrent miscarriage is seen more often in women with a septate uterus in comparison with women with a normal uterus. **Surgical removal (hysteroscopic metroplasty) of this septum can potentially improve pregnancy outcomes in women with RM.** However, judgment as to whether this treatment is effective is not possible due to a lack of available randomised evidence.

- ❖ *Anamnesi positiva per 2 aborti è indicazione a metroplastica*
- ❖ *Se anamnesi positiva per 1 solo aborto, il ruolo della metroplastica è controverso*

*Homer HA, Li TC, Cooke ID. The septate uterus: a review of management and reproductive outcome. Fertil Steril. 2000 Jan;73(1):1-14. Review.*

# INDICAZIONI ALLA METROPLASTICA

## ❖ *Parto pretermine*

Si riduce il rischio di ricorrenza di parto pretermine

## ❖ *Il ruolo della metroplastica nell'infertilità primaria risulta controverso.*

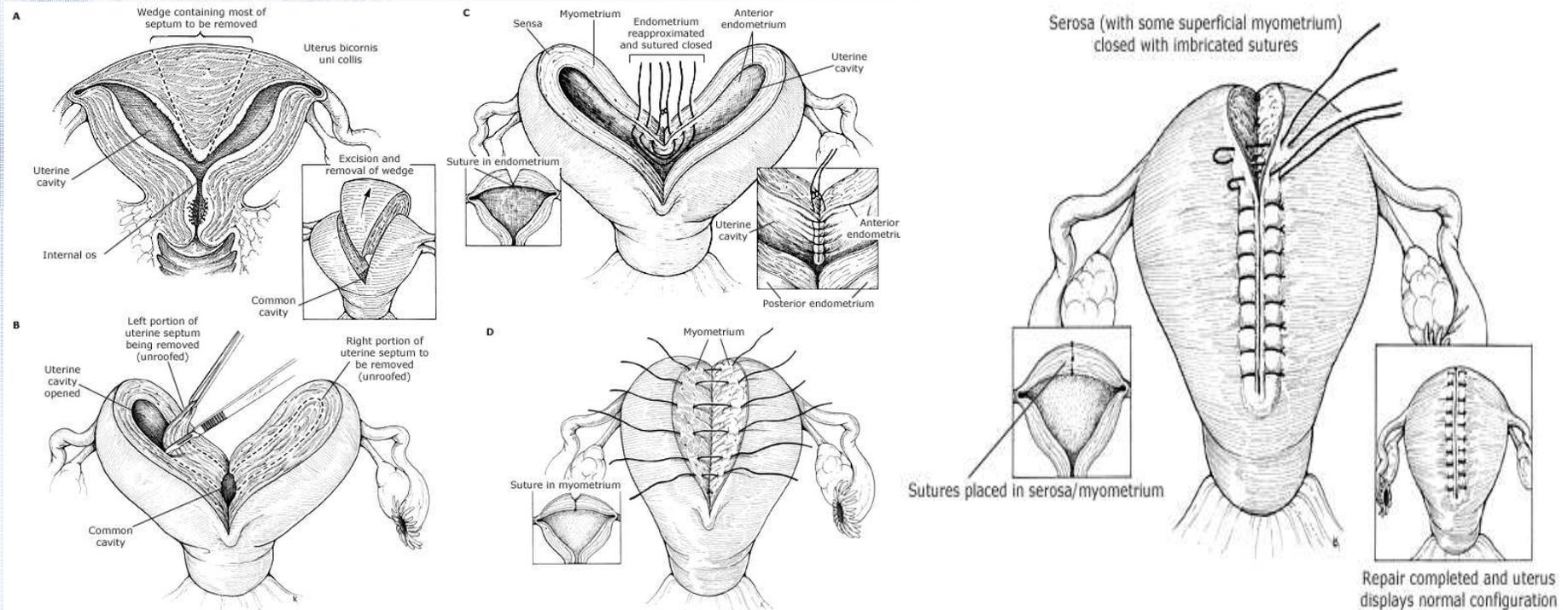
- ✓ In caso di infertilità primaria è necessario, prima di proporre la metroplastica, investigare altre possibili cause intra ed extrauterine di infertilità
- ✓ La percentuale di gravidanze ottenute dopo metroplastica in donne affette da infertilità è inferiore a quella delle Pazienti trattate per aborto ricorrente.
  - ✓ La metroplastica migliora la possibilità di successo della PMA

*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

# TECNICHE DI METROPLASTICA

## ❖ METROPLASTICA ADDOMINALE

✓ *Jones type*

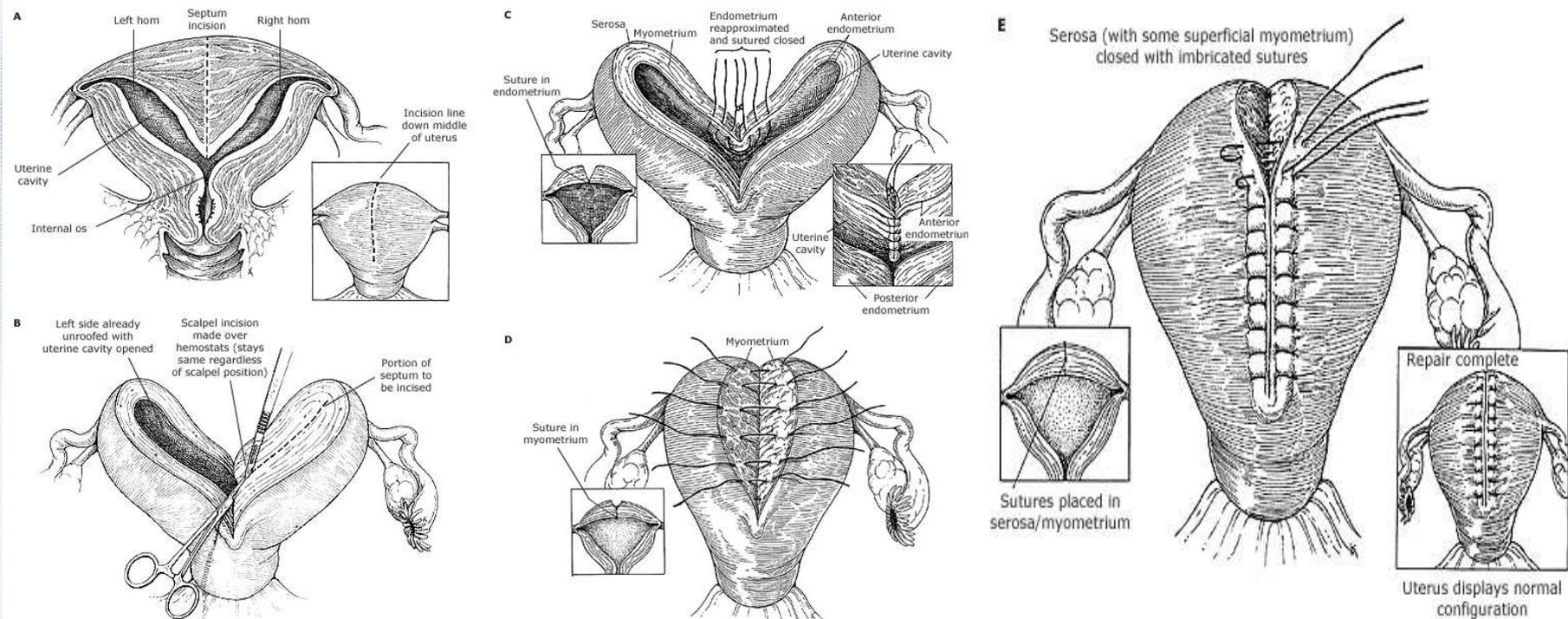


*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

# TECNICHE DI METROPLASTICA

## ❖ METROPLASTICA ADDOMINALE

### ✓ Tomkins type



Valle RF, Ekpo GE. *Hysteroscopic metroplasty for the septate uterus: review and meta-analysis.* J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.

# TECNICHE DI METROPLASTICA

## ❖ *METROPLASTICA ADDOMINALE*

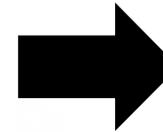
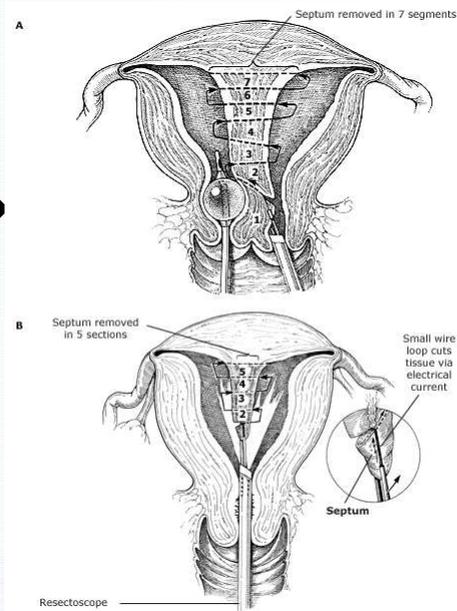
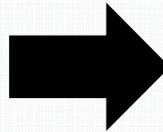
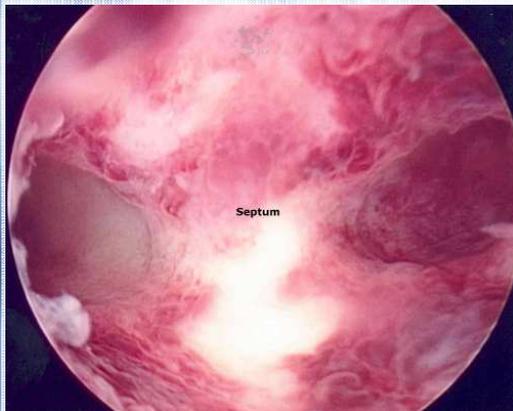
### **RISCHI correlati:**

- ✓ sviluppo di aderenze
- ✓ prolungato ricovero
- ✓ 6 mesi di attesa prima di intraprendere una gravidanza
- ✓ taglio cesareo per l'espletamento del parto

*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

# TECNICHE DI METROPLASTICA

## ❖ *METROPLASTICA ISTEROSCOPICA*



### Vantaggi:

- ✓ Rapida riabilitazione
- ✓ 8-10 settimane di attesa prima di intraprendere una gravidanza
- ✓ Non necessario taglio cesareo per l'espletamento del parto

*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

# TECNICHE DI METROPLASTICA

## ❖ METROPLASTICA ISTEROSCOPICA

### Complicanze:

- ✓ Sanguinamento durante o post metroplastica
- ✓ Intravasazione
- ✓ Perforazione uterina
- ✓ Sinechie postoperatorie
- ✓ Rottura d'utero nella gravidanza successiva

Uterine rupture after hysteroscopic metroplasty

Source, year	Patient age, yr	Method of metroplasty	Uterine perforation recognized	Time from metroplasty to pregnancy	Gestational age at rupture, wk
Israel and March [156], 1984	25	Scissors	No	2 Mo	39 <sup>a</sup>
Creinin and Chen [157], 1992	36	Resectoscope	Yes	5 Mo	37 (twin gestation)
Howe [158], 1993	29	Rigid scissors	Yes	12 Mo	33
Halvorson et al [159], 1993	29	Scissors	Yes	1 Mo	19
Lobaugh et al [160], 1994	29	KTP laser	No	1.6 Yr	32
Tannous et al [161], 1996	36	Resectoscope	Yes	2 Mo	39
Alatas et al [162], 1998	27	Resectoscope	No	18 Wk	33 (placenta accreta)
Gabriele et al [163], 1999	31	Scissors with electrosurgery	Yes	11 Mo	37 (rupture during induction of labor)
Chokri et al [164], 2000	38	Resectoscope	No	2 Yr	35 <sup>b</sup>
Angell et al [165], 2002	NR	Rigid scissors	No	NR	37
Kerimis et al [166], 2002	37	Scissors with electrosurgery	No	3 Mo	41 (spontaneous labor)
Conturso et al [167], 2003	28	Resectoscope	Yes	12 Mo	28
Ducarme et al [168], 2003	22	Resectoscope	No	1 Yr	32
Kucera et al [169], 2005	20	Resectoscope	Yes	14 Mo	40 (rupture during labor)
Sanchez et al [170], 2005	32	Resectoscope	Yes	17 Mo	37
Satiroglu et al [171], 2009	30	Resectoscope	No	2 Mo	29
Gultekin et al [172], 2012	26	Resectoscope	No	8 Mo	37 (cesarean section, fetus alive)
	26	Resectoscope	No	11 Mo	34 (cesarean section, fetus dead)

NR = not reported.

<sup>a</sup> At 18 months after uterine rupture and repair, the patient became pregnant, and delivered at term via elective cesarean section.

<sup>b</sup> At 7 months after uterine rupture and repair, the patient became pregnant; however, at 27 weeks, uterine rupture occurred again.

Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. *J Minim Invasive Gynecol.* 2013 Jan-Feb;20(1):22-42.

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

## ❖ *METROPLASTICA ADDOMINALE*

*Outcome riproduttivo pari al 70%.*

Outcome after abdominal metroplasty			Postoperative outcome <sup>a</sup>					
Source, year	No. of patients	Method	Complications	Pregnancy rate/no. of pregnancies	Live-birth rate	Term	Preterm	Abortion
Rock and Jones [62], 1977	43 Bicornuate, septate, didelphys	Jones	1 Intrauterine synechia	37/39 (58 pregnancies)	41/58	42/58	4/58	12/58
Musich and Behrman [67], 1978	21 12 Septate, 6 bicornuate, 3 arcuate	Tompkins, Jones, Strassman	NR	16/21	12/16	12/16	NA	4/16
Mercer et al [68], 1981	17 15 Septate, 1 bicornuate, 1 didelphys	15 Jones, 2 Strassman	NR	12/16	14/15	14/15	NA	1/15
Kessler et al [69], 1986	17 4 Septate, 12 bicornuate, 1 didelphys	13 Strassman, 3 Tompkins, 1 Jones	NR	4	2/4	2/4	NA	2/4
Candiani et al [70], 1990	73 73 Septate, 2 bicornuate	55 Tompkins, 6 Jones, 5 Te Linde, 5 Strassman	NR	56	45/56	45/56	NR	11/56
Kirk et al [72], 1993	22 Patients, 44 Pregnancies	18 Tompkins, 5 Jones, 3 Strassman	NR	44	33/44	31/44	4/44	9/44

NA = not applicable; NR = none reported.  
<sup>a</sup> When provided, listed outcomes are only for metroplasty to treat septate uterus.

*Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.*

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

## ❖ *METROPLASTICA ISTEROSCOPICA*

### The septate uterus: a review of management and reproductive outcome

*Hayden A. Homer, M.B.B.S., Tin-Chiu Li, M.B.B.S., Ph.D., and Ian D. Cooke, M.B.B.S.*

*Reproductive Medicine and Surgery Unit, Department of Obstetrics and Gynaecology, Jessop Hospital for Women, Sheffield, Yorkshire, United Kingdom*

**Objective:** To review the literature on the diagnosis, prevalence, and treatment of the septate uterus, with special reference to hysteroscopic metroplasty and its effect on reproductive outcome.

**Design:** Pertinent studies were identified through a computer MEDLINE search. References of selected articles were hand-searched for additional citations.

**Result(s):** Reliable diagnosis of the septate uterus depends on accurate assessment of the uterine fundal contour. At present, the combined use of laparoscopy and hysteroscopy is the gold standard for diagnosis, although recent reports of two-dimensional, transvaginal, contrast ultrasound and of three-dimensional ultrasound appear promising. The prevalence of the septate uterus is increased in women with repeated pregnancy loss. A metaanalysis of published retrospective data comparing pregnancy outcome before and after hysteroscopic septoplasty indicated a marked improvement after surgery.

**Conclusion(s):** The hysteroscopic approach to treatment, with its simplicity, minimal postoperative sequelae, and improved reproductive outcome, has enabled a more liberalized approach to treatment that is now being extended to include not only patients with recurrent pregnancy loss and premature labor but also patients with infertility, especially if IVF is being contemplated. (Fertil Steril® 2000;73:1–14. ©1999 by American Society for Reproductive Medicine.)

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

## ❖ METROPLASTICA ISTEROSCOPICA

Comparison of reproductive outcome before and after hysteroscopic metroplasty for the septate uterus in selected series.

Author (ref.)	Before metroplasty					After metroplasty			
	No. of patients	No. of pregnancies	No. of miscarriages (%)	No. of preterm deliveries (%)	No. of term deliveries (%)	No. of pregnancies	No. of miscarriages (%)	No. of preterm deliveries (%)	No. of term deliveries (%)
Chervenak and Neuwirth (72)	2	3	3 (100)	0	0	2	0	0	2 (100)
Daly et al.* (70)	17	40	34 (85)	5 (12.5)	1 (2.5)	9	2 (22)	1 (11)	6 (67)
De Cherney and Polan* (81)	15	NR	>30	NR	NR	11	2 (18)	0	9 (82)
Israel and March* (71)	12	28	26 (93)	0	2 (7)	2	1 (50)	0	1 (50)
De Cherney et al. (79)	103	NR	>206	NR	NR	>71	>8	1	NR
Valle and Sciarra* (18)	12	42	30 (71)	12 (29)	0	10	2 (20)	2 (20)	6 (60)
Fayez (20)	12	21	19 (90)	2 (10)	0	16	2 (13)	0	14 (87.5)
March and Israel (16)	57	240	212 (88)	21 (9)	7 (3)	56	8 (14)	4 (7)	44 (79)
Perino et al. (33)	24	27	24 (89)	3 (11)	0	15	1 (7)	0	14 (93)
Daly et al. (69)	55	150	130 (87)	13 (9)	7 (5)	75	15 (20)	5 (7)	55 (73)
Choe and Baggish (17)	14	38	31 (82)	6 (16)	1 (3)	12	1 (8.3)	1 (8.3)	10 (83.3)
Fedele et al. (73)	71	>139	>139	NR	NR	65	10 (16)	10 (16)	45 (69.2)
Cararach et al. (74)	62	176	160 (91)	11 (6)	5 (3)	41	12 (29)	0	29 (48)
Pabuccu et al. (76)	49	108	96 (89)	11 (10)	1 (1)	44	2 (4.5)	2 (4.5)	40 (91)
Valle (77)	115	299	258 (86.3)	28 (9.4)	13 (4.3)	103	12 (12)	7 (7)	84 (81)
Mencaglia and Tantini† (40)	94	NR	>94	NR	NR	62	4 (6)	0	58 (94)
Total	658	1,062	933 (88)	95 (9)	34 (3)	491	67 (14)	29 (6)	395 (80)

Note: NR = not recorded.

\* Not included in total to avoid duplication of patients.

† Not included in total because of incomplete data.

Homer. The septate uterus. Fertil Steril 2000.

Reproductive outcome after hysteroscopic metroplasty for the septate uterus in women with primary infertility.

Author (ref.)	No. of patients who had metroplasty for a septate uterus	No. of patients with infertility (%)	Crude pregnancy rate after treatment (%)
Fayez (20)	19	7 (37)	71
Perino et al. (33)	24	8 (33)	63
Daly et al. (69)	70	15 (21)	47
Querleu et al.* (82)	24	9 (38)	67
Marabini et al. (75)	40	14 (35)	44
Pabuccu et al. (76)	59	10 (17)	63
Colacurci et al. (78)	69	21 (30)	29
Total	305	84 (28)	48

\* Hysteroscopy not performed; US guidance used.

Homer. The septate uterus. Fertil Steril 2000.

80%

Homer HA, Li TC, Cooke ID. The septate uterus: a review of management and reproductive outcome. Fertil Steril. 2000 Jan;73(1):1-14. Review.

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

❖ *METROPLASTICA ISTEROSCOPICA*

Reprod Biol Endocrinol. 2010 May 21;8:52. doi: 10.1186/1477-7827-8-52.

**Reproductive outcome after hysteroscopic septoplasty in patients with septate uterus--a retrospective cohort study and systematic review of the literature.**

Nouri K, Ott J, Huber JC, Fischer EM, Stögbauer L, Tempfer CB.

Department of Gynecology and Gynecologic Oncology, Medical University of Vienna, Vienna, Austria.

## Abstract

**BACKGROUND:** **Septate uterus**, one of the most common forms of congenital uterine malformations, negatively affects female **reproductive** health.

**METHODS:** In a **retrospective cohort study**, we evaluated the **reproductive outcome after hysteroscopic septoplasty** in 64 women with **septate uterus** and primary or secondary infertility. We performed a **systematic review** of studies evaluating the **reproductive outcome after hysteroscopic septoplasty**.

**RESULTS:** Sixty-four women underwent **hysteroscopic septoplasty**. In 2/64 (3%) women, intraoperative uterine perforation occurred. Complete follow-up was available for 49/64 (76%) **patients**. Mean follow-up time was 68.6+/-5.2 months. The overall pregnancy rate **after hysteroscopic septoplasty** was 69% (34/49). The overall life birth rate (LBR) was 49% (24/49). The mean time interval between surgery and the first life birth was 35.8+/-22.5 months. Including our own data, we identified 18 studies investigating the effect of **septoplasty on reproductive outcome** in 1501 women. A pooled analysis demonstrated that **hysteroscopic septoplasty** resulted in an overall pregnancy rate of 60% (892/1501) and a LBR of 45% (686/1501). The overall rate of intra- and postoperative complications was 1.7% (23/1324) and the overall rate of re-hysteroscopy was 6% (79/1324).

**CONCLUSIONS:** In women with **septate uterus** and a history of infertility, **hysteroscopic septoplasty** is a safe and effective procedure resulting in a pregnancy rate of 60% and a LBR of 45%.

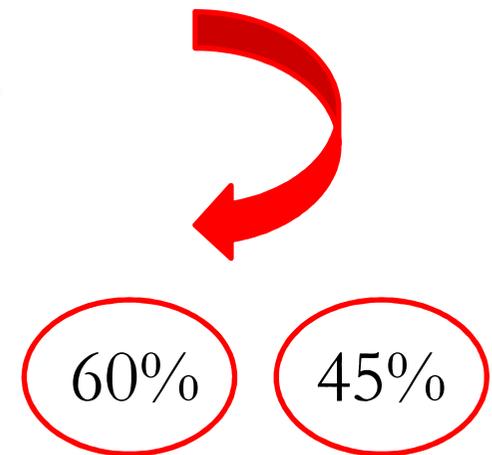
# OUTCOME RIPRODUTTIVO POST METROPLASTICA

## ❖ METROPLASTICA ISTEROSCOPICA

Literature on pregnancy rates and live birth rates after hysteroscopic uterine septoplasty in women with septate uterus

Author	Year	Patient number	Uterine mal-formation	Patient characteristics	Pregnancy rate	Live birth rate
Venturoli et al. [13]	2002	141	IUS	Infertility; RM	74/141 (52%)	56/141 (39%); 14 ongoing
Doridot et al [14]	2003	70	CUS	21 PI; 33 RM; 16 LM or PT	8/21 (38%); 13/33 (38%); 10/16 (60%)	-
Jakiel et al. [15]	2004	31	CUS	PI; RM; LM and PT	18/31 (58%)	11 (38%)
Hollett-Caines et al. [20]	2006	26	CUS	Infertility; RM	21/26 (80%)	15/26 (57%)
Pace et al. [16]	2006	70	IUS; CUS	PI; RM; PT	30/40 (75%)	25/40 (62%)
Colacurci et al. [21]	2007	135	CUS	Infertility	99/135 (73%)	82/135 (60%)
Colacurci et al. [22]	1996	69	IUS; CUS	PI; RM	46/69 (66%)	36/69 (52%); 4 ongoing
Saygili-Yimaz et al. [23]	2003	361	CUS	PI; RM	180/361 (49%)	124/361 (34%)
Pabuçcu & Gornel [24]	2004	61	CUS	PI	25/61 (41%)	18/61 (29%)
Valle RF [26]	1996	124	CUS	RM	101/124 (81%)	91/124 (73%)
Ozgun et al. [11]	2007	119	IUS	IVF	57/119 (47%)	51/119 (42%)
Marabini et al. [27]	1994	40	CUS	Infertility; RM	19/26 (73%)	13/26 (50%); 4 ongoing
Kupesic & Kurjak [28]	1998	116	CUS	Infertility	59/116 (50%)	48/116 (41%)
Porcu et al. [29]	2000	63	CUS	RM	45/56 (80%)	28/56 (50%)
Guarino et al. [31]	1989	35	CUS	PI; RM	18/35 (51%)	16/35 (45%)
Wang et al. [30]	2008	25	CUS	PI and SI; RM	13/23 (56%)	6/23 (26%); 6 ongoing
Mollo et al. [17]	2009	44	CUS	-	17/44 (38%)	15/44(34%)
Litta et al. [25]	2007	63	IUS	-	36/45 (80%)	27/45 (60%)
Nouri et al.	2010	64	IUS	PI and SI; RM	34/49 (69%)	24/49 (49%)
Total	-	1587	IUS; CUS	-	892/1501 (60%)	686/1501 (45%)

IUS = incomplete uterine septum; CUS = complete uterine septum; RM = recurrent miscarriages; PT = preterm delivery; PI = primary infertility; SI = secondary infertility; LM = late miscarriages



Nouri K et al. Reproductive outcome after hysteroscopic septoplasty in patients with septate uterus a retrospective cohort study and systematic review of the literature. *Reprod Biol Endocrinol.* 2010 May 21;8:52. Review.

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

❖ *METROPLASTICA ISTEROSCOPICA*

## Hysteroscopic Metroplasty for the Septate Uterus: Review and Meta-Analysis

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*From the Department of Obstetrics and Gynecology, Northwestern University Feinberg School of Medicine, Chicago, Illinois (both authors).*

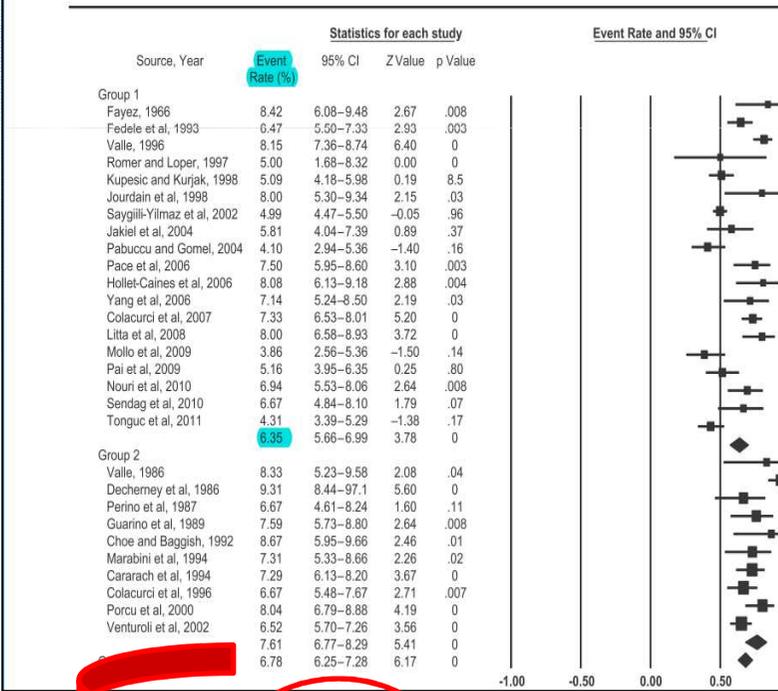
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**ABSTRACT** The introduction of hysteroscopy to diagnose and treat intrauterine conditions, specifically to divide the uterine septum, or metroplasty, has replaced the traditional laparotomy approach, and objective results demonstrate its salutary effects in women treated. **Hysteroscopic metroplasty averts the implications of major invasive abdominal surgery, with good and satisfactory results in pregnancy and live-birth rates,** despite the lack of prospective, randomized, controlled studies. A careful review of the published results supports this type of treatment when the uterine septum adversely affects normal reproductive function. *Journal of Minimally Invasive Gynecology* (2013) 20, 22–42 © 2013 AAGL. All rights reserved.

# OUTCOME RIPRODUTTIVO POST METROPLASTICA

## ❖ METROPLASTICA ISTEROSCOPICA

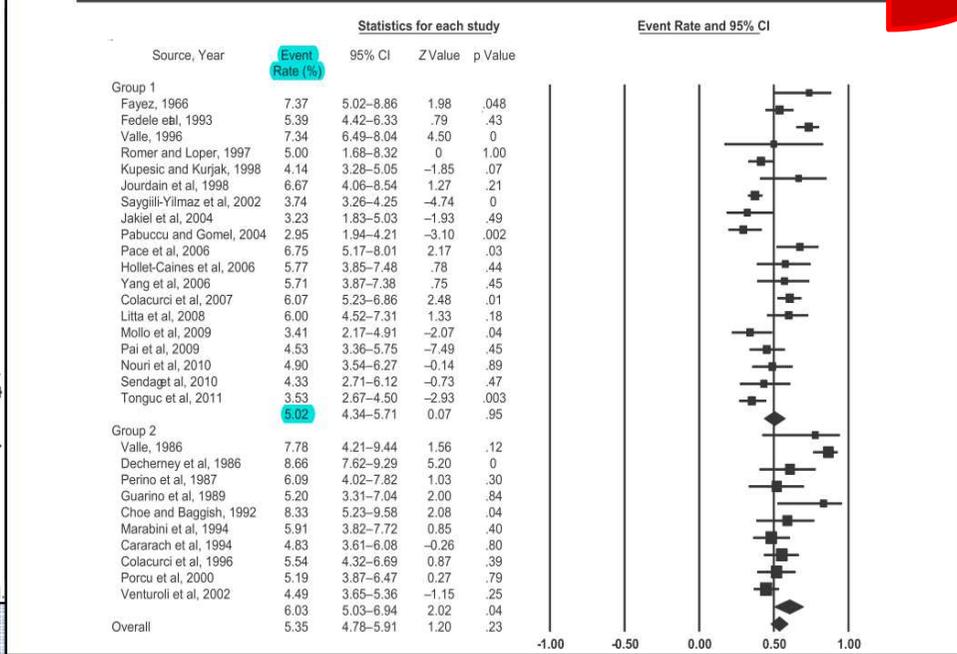
**Pregnancy rate after hysteroscopic metroplasty.** Initial meta-analysis was performed on all studies (groups 1 and 2) with pregnancy rate reported as percentage. After excluding studies with inconsistent definition of pregnancy rate (i.e., all post-metroplasty pregnancies reported, not just index pregnancy) and studies with a substantial number of subjects lost to follow-up or with ongoing pregnancies, a second analysis was performed on the "clean" studies (group 1).



63,5%

50,2%

**Live-birth rate after hysteroscopic metroplasty.** Initial meta-analysis was performed on all studies (groups 1 and 2) with live-birth rate reported as percentage. After excluding studies with inconsistent definition of pregnancy rate (i.e., all post-metroplasty pregnancies reported, not just index pregnancy) and studies with a substantial number of subjects lost to follow-up or with ongoing pregnancies, a second analysis was performed on the "clean" studies (group 1).



Valle RF, Ekpo GE. Hysteroscopic metroplasty for the septate uterus: review and meta-analysis. J Minim Invasive Gynecol. 2013 Jan-Feb;20(1):22-42.

# CONCLUSIONI

- ✓ **Necessario approccio teso ad indagare le cause intra ed extrauterine dell'infertilità primaria e poliabortività**
- ✓ **Riservare la metroplastica a Pazienti con anamnesi positiva per aborto ricorrente e infertilità non altrimenti spiegata**
- ✓ **L'outcome postoperatorio porta ad un soddisfacente miglioramento della percentuale di gravidanze ottenute**
- ✓ **La bassa morbilità intra ed extraoperatoria rendono la metroplastica isteroscopica la tecnica di prima scelta in caso di utero setto**
- ✓ **Le prospettive di outcome riproduttivo sono del 48% nelle donne con infertilità primaria e del 80% in quelle con aborto ricorrente**