



# Apoplessia ipofisaria: riconoscerla e gestirla



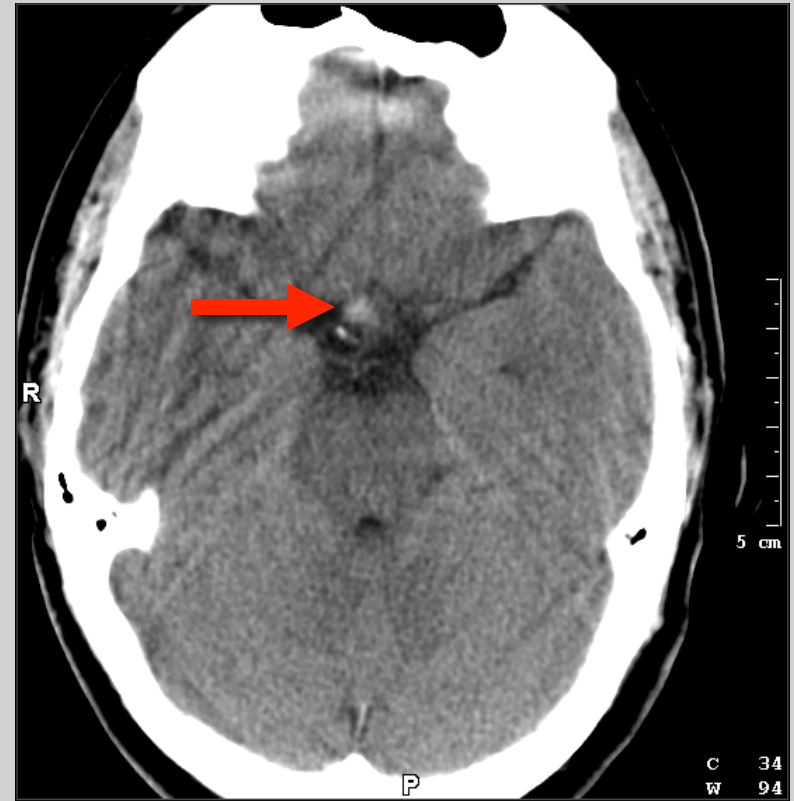
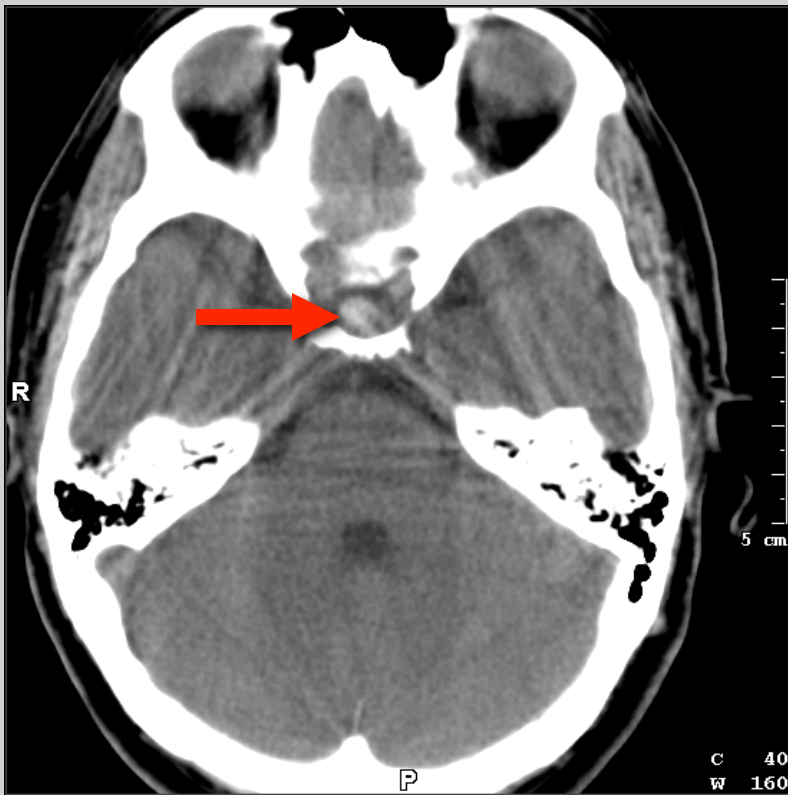
Bari,  
7-10 novembre 2013

M. Losa, Rep. Neurochirurgia, Ospedale San Raffaele, Milano

# Terapia e follow-up

# CASO CLINICO

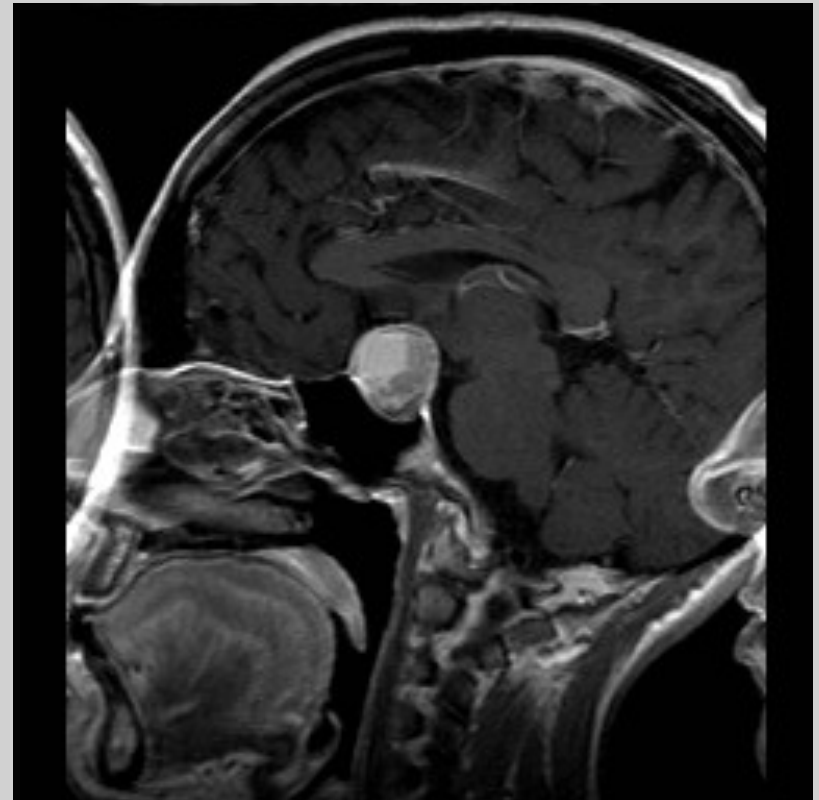
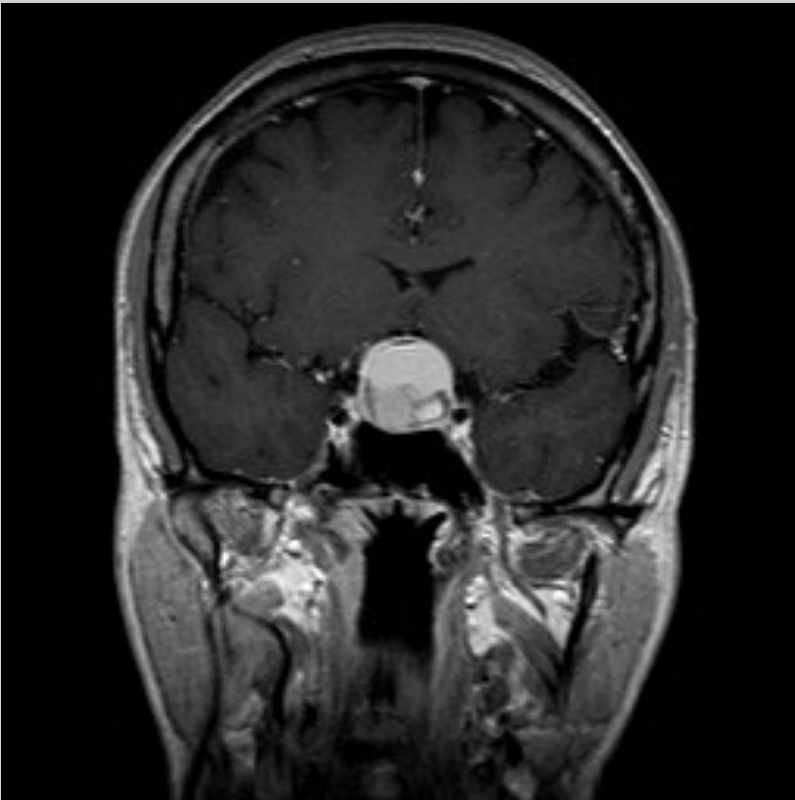
Donna di 37 anni. Comparsa improvvisa di forte cefalea, annebbiamento visivo e diplopia nello sguardo laterale a sinistra. Accesso al P.S. TAC smdc mostra lesione iperdensa in regione sellare. Ricovero in Neurochirurgia



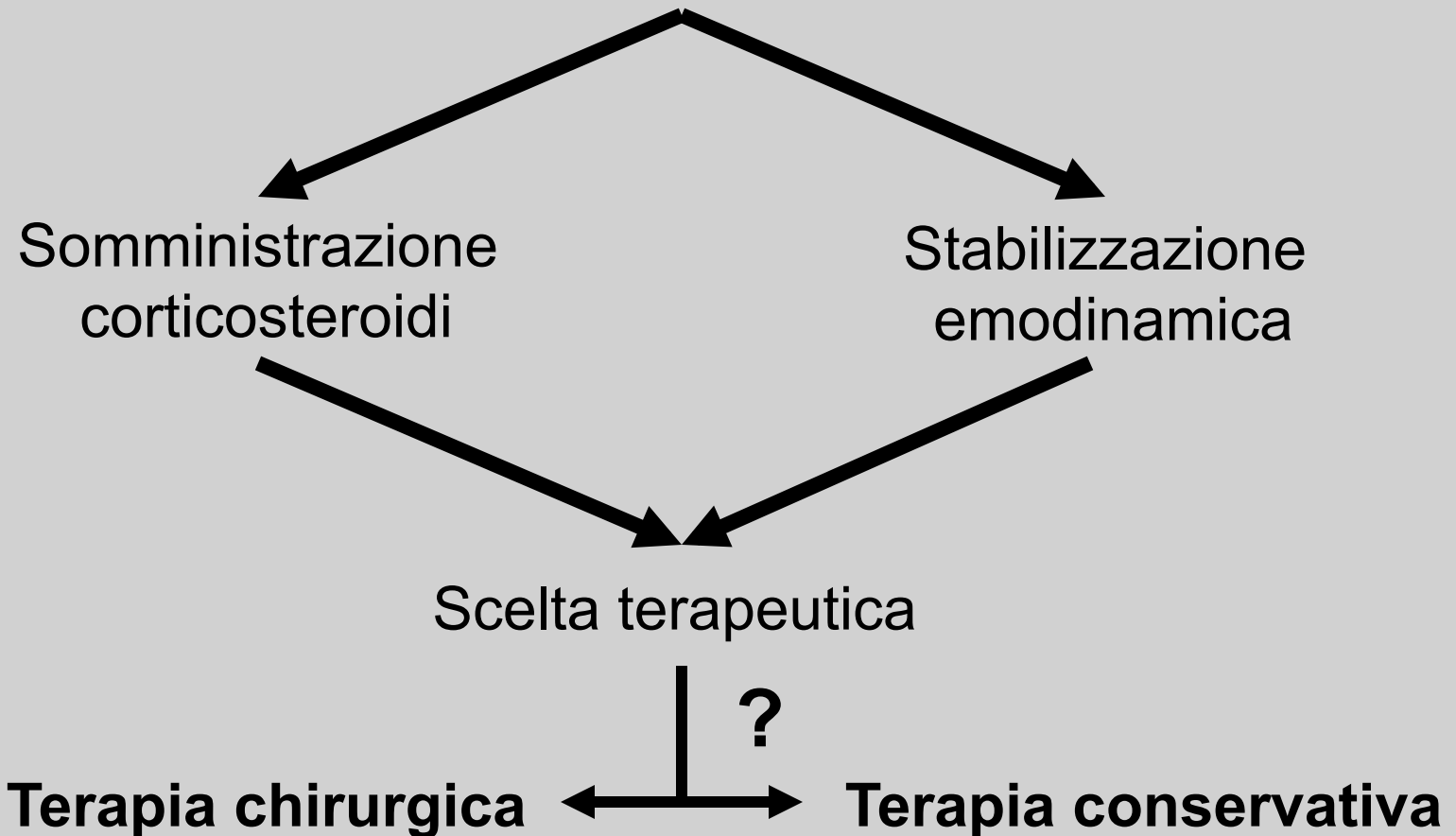
# CASO CLINICO



Visita oculistica: quadrantopsia temporale superiore in OD ed emianopsia temporale in OS. Paresi VI° nervo cranico sinistro.  
 Esami ormonali: PRL 52 ng/ml; ipopituitarismo.  
 RM: lesione intra- e sovrasellare con aree disomogenee



## TERAPIA DELL'APOPLESSIA IPOFISARIA





# APOPLESSIA IPOFISARIA: INDICAZIONI PER LA TERAPIA STEROIDEA



Bari,  
7-10 novembre 2013



Clinical Endocrinology (2011) 74, 9–20

doi: 10.1111/j.1365-2265.2010.03913.x

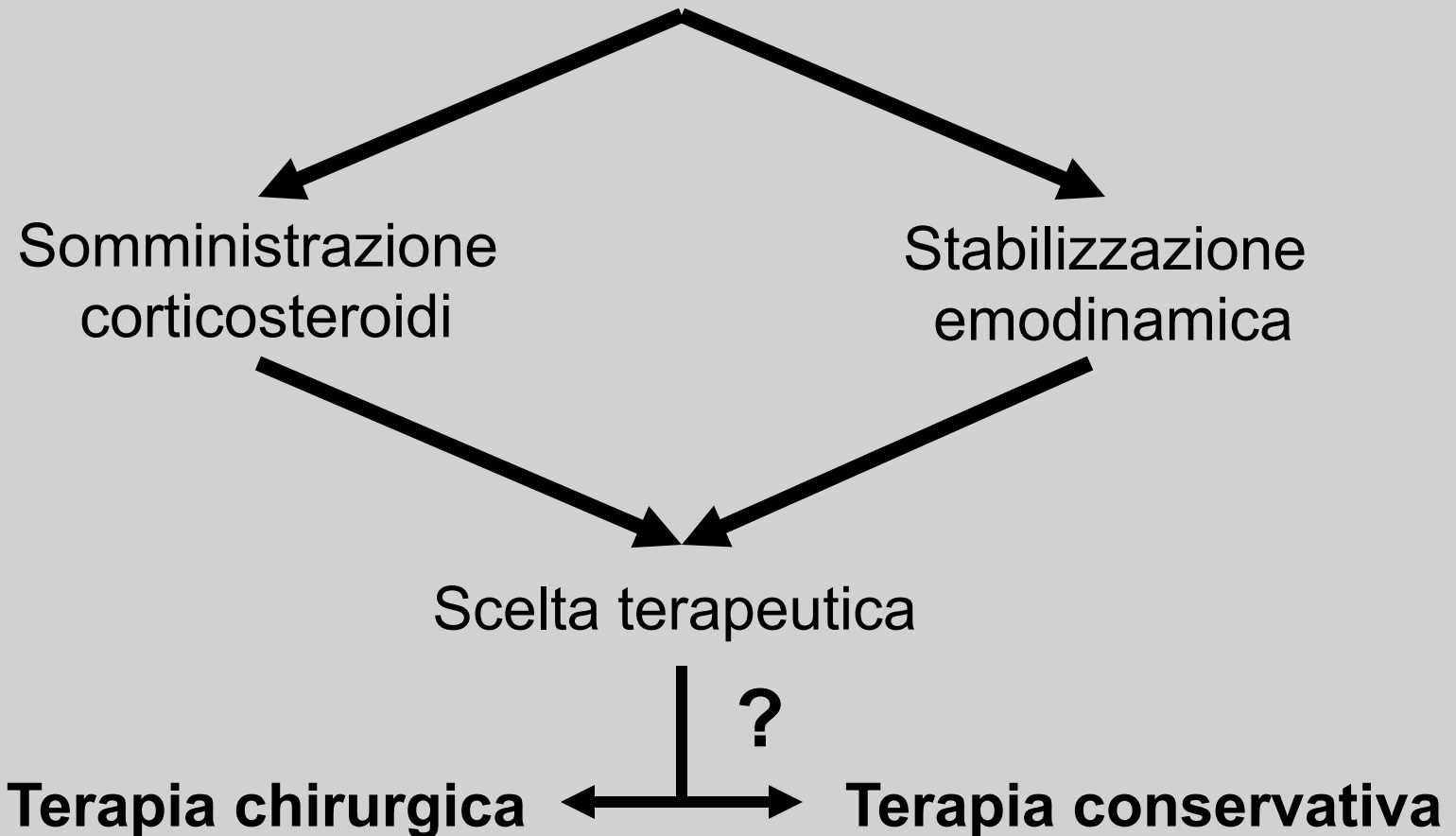
## CLINICAL GUIDELINE

### UK guidelines for the management of pituitary apoplexy Pituitary Apoplexy Guidelines Development Group: May 2010

Senthil Rajasekarant, Mark Vanderpump‡, Stephanie Baldeweg§, Will Drake¶, Narendra Reddy†, Marian Lanyon\*\*, Andrew Markey††, Gordon Plant\*\*, Michael Powell‡‡, Saurabh Sinha§§ and John Wass\*

- Indication for empirical steroid therapy are haemodynamic instability, altered consciousness level, reduced visual acuity and severe visual field defects
- In adults hydrocortisone 100-200 mg as an iv bolus is appropriate, followed either by 2-4 mg per hour by continuous iv infusion or by 50-100 mg six hourly by im injection until haemodynamic stability followed by usual oral replacement therapy

## TERAPIA DELL'APOPLESSIA IPOFISARIA





# ESISTONO LINEE GUIDA?



Bari,  
7-10 novembre 2013

SPECIAL FEATURE

Clinical Practice Guideline

## **Pituitary Incidentaloma: An Endocrine Society Clinical Practice Guideline**

Pamela U. Freda, Albert M. Beckers, Laurence Katznelson, Mark E. Molitch, Victor M. Montori, Kalmon D. Post, and Mary Lee Vance

**We recommend that patients with a pituitary incidentaloma be referred for surgery if they have the following (1/00000):**

- A Visual field deficit due to the lesion
- Other visual abnormalities due to the lesion
- Lesion abutting the optic nerves or chiasm
- Pituitary apoplexy with visual disturbances**



# ESISTONO LINEE GUIDA?



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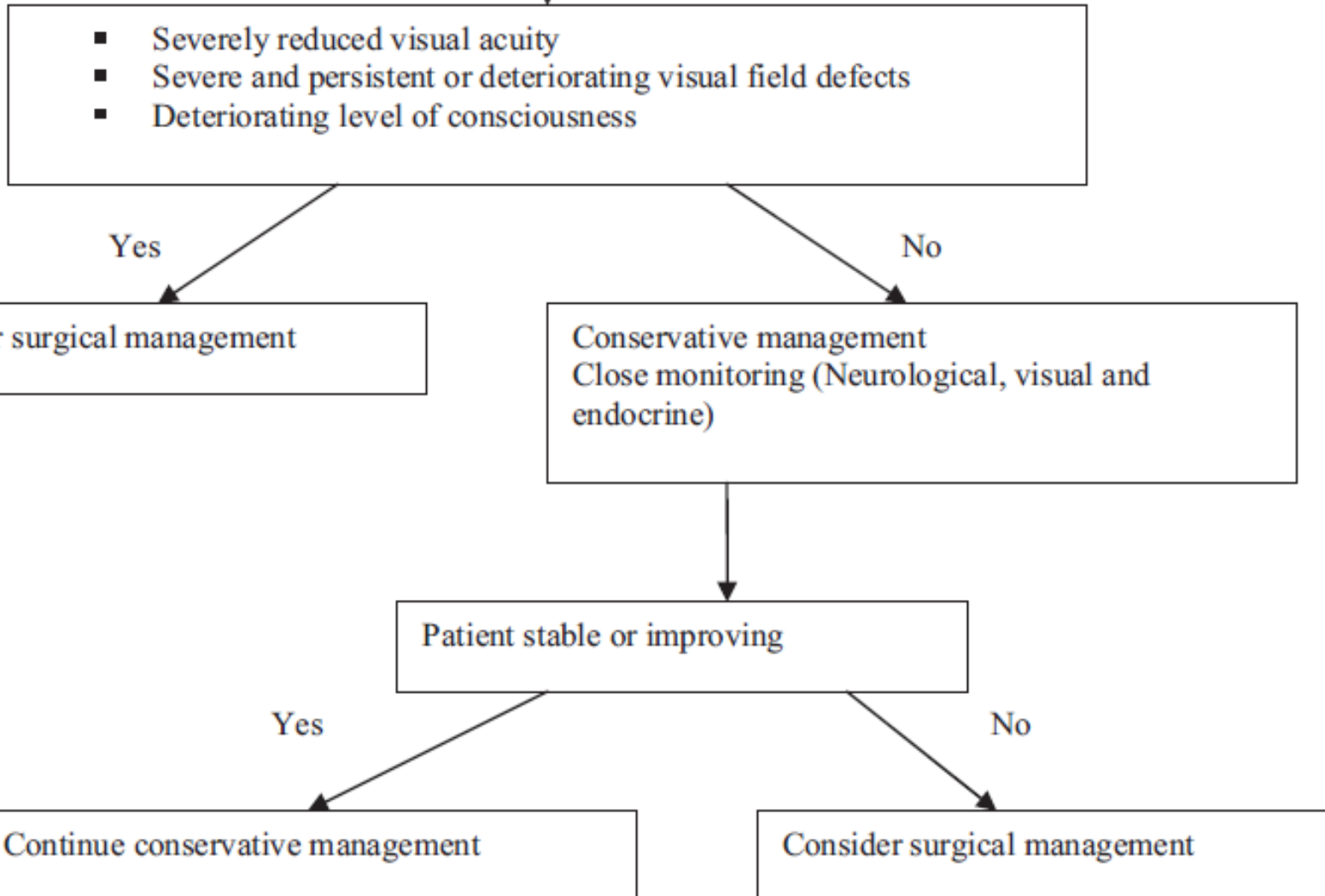
Pituitary Apoplexy Guidelines Development Group: May 2010

Senthil Rajasekarant, Mark Vanderpump‡, Stephanie Baldeweg§, Will Drake¶, Narendra Reddy†, Marian Lanyon\*\*, Andrew Markey††, Gordon Plant\*\*, Michael Powell‡‡, Saurabh Sinha§§ and John Wass\*

- **The principle controversy in management relates to the role and the timing of surgery**
- **Owing to the rarity of the condition there are no randomized controlled trials in the literature but several case series and reports**



# ESISTONO LINEE GUIDA?



**Table 4** Comparison of outcomes in the surgically and conservatively managed groups ( $P = NS$  for all)

	Surgical group ( $n = 15$ )	Conservative group ( $n = 18$ )
Visual field recovery	57% (4/7)	100% (6/6)
Ocular palsy recovery	63% (5/8)	100% (7/7)
Hypocortisolism	87% (13/15)	72% (13/18)
Hypothyroidism	60% (9/15)	87% (13/15)
Hypogonadism	67% (10/15)	83% (15/18)



# APOPLESSIA IPOFISARIA: PARAGONE FRA TRE DIVERSE STRATEGIE TERAPEUTICHE



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Outcome	Conservative management (n = 22) (%)	Emergency Surgery (n = 23) (%)	Delayed elective surgery (n = 10) (%)	P value
Improvement of visual field defects	<b>80</b>	<b>80</b>	<b>60</b>	<b>NS</b>
Improvement of cranial nerve palsies	<b>100</b>	<b>92</b>	<b>100</b>	<b>NS</b>
Hypopituitarism	<b>90</b>	<b>96</b>	<b>80</b>	<b>NS</b>

*Modified from Bujawansa et al. Clin Endocrinol 2013*



# APOPLESSIA IPOFISARIA: TERAPIA CHIRURGICA O TERAPIA CONSERVATIVA?



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7-10 novembre 2013

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**Studies looking at the role of conservative versus surgical management of apoplexy with regard to visual loss all suffer from selection bias and a lack of appropriately matched patients**



# APOPLESSIA IPOFISARIA: FREQUENZA SECONDO IL TIPO DI ADENOMA



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Tipo adenoma	Tumori non apoplettici	Tumori apoplettici	%
NFPA	925	75	<b>7.5%</b>
GH	694	2	<b>0.3%</b>
ACTH	578	4	<b>0.7%</b>
PRL	236	16	<b>6.3%</b>
TSH	64	0	<b>0%</b>
Totale	2497	97	<b>3.7%</b>



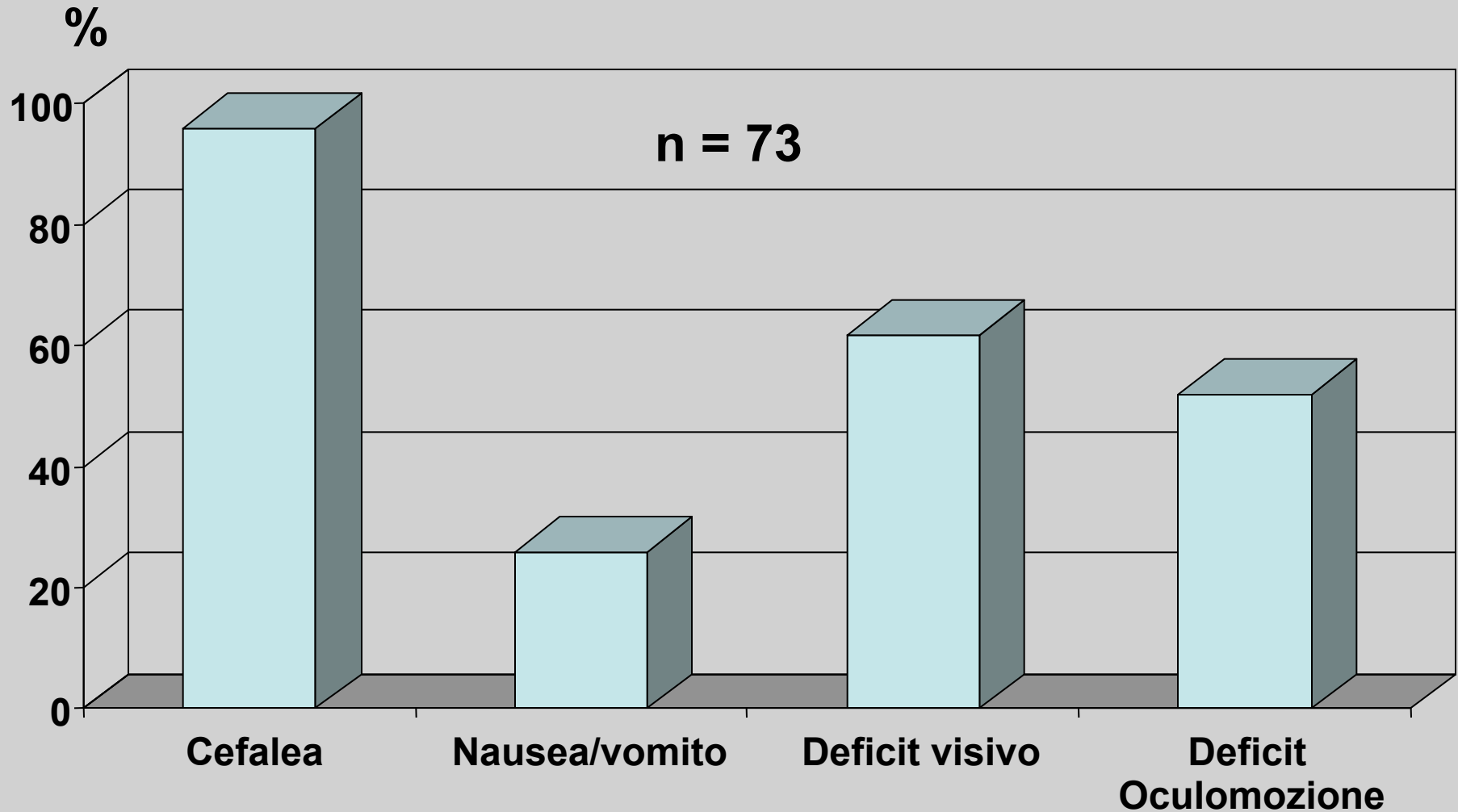
# APOPLESSIA IPOFISARIA: CARATTERISTICHE CLINICHE IN PAZIENTI CON NFPA



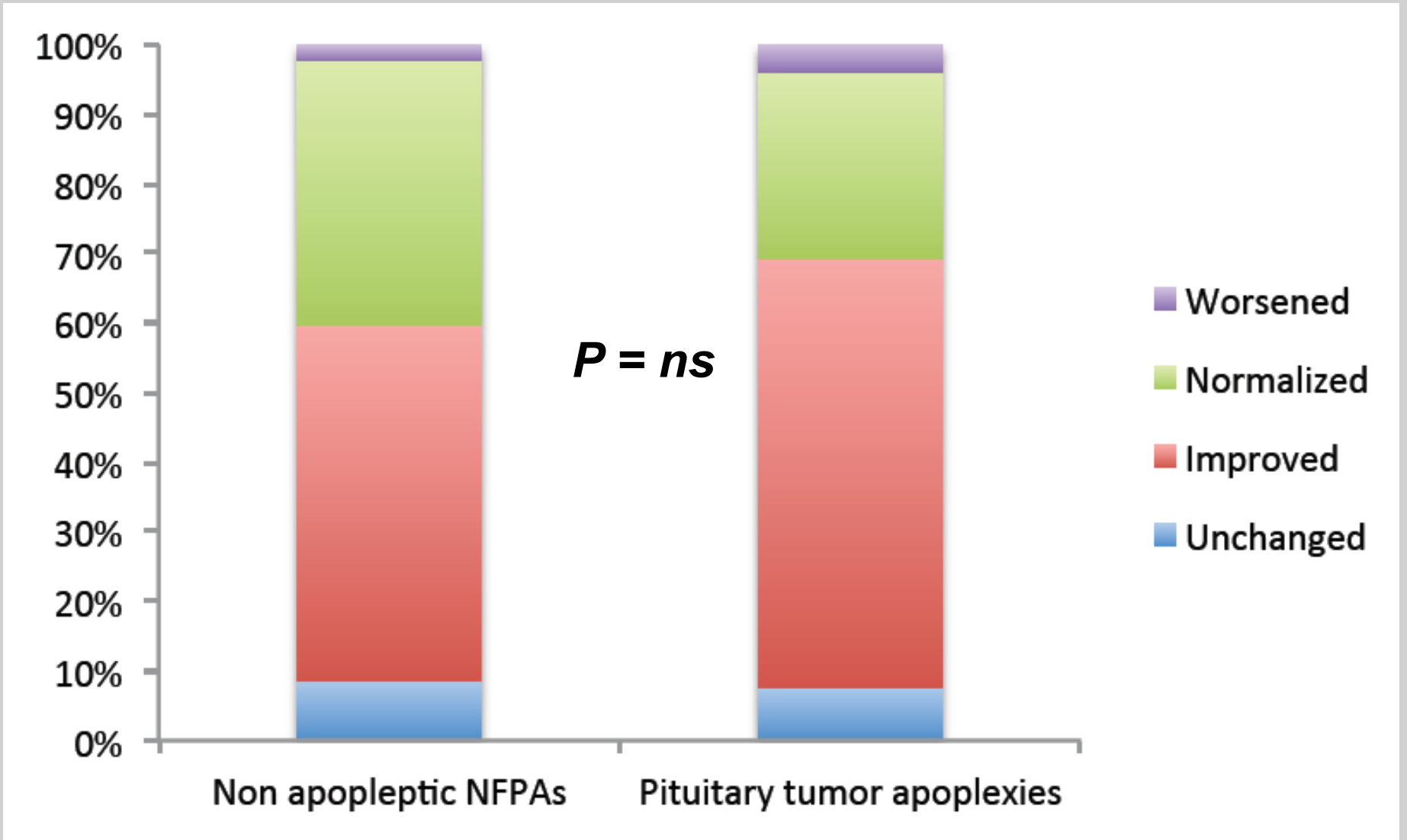
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Caratteristica	Apoplessia (n = 73)	No apoplessia (n = 769)	P
Età	50.4 ± 15.8	53.5 ± 1	0.06
Maschi	65.8%	55.8%	0.19
Diametro tumorale	28.4 ± 8.2	27.8 ± 8.6	0.44
Invasione s. cavernoso	26.0%	29.5%	0.22
<b>Ipogonadismo</b>	<b>82.2%</b>	<b>66.4%</b>	<b>&lt; 0.05</b>
<b>Ipotiroidismo</b>	<b>45.2%</b>	<b>23.7%</b>	<b>&lt; 0.01</b>
<b>Iposurrenalismo</b>	<b>45.2%</b>	<b>21.2%</b>	<b>&lt; 0.01</b>

# APOPLESSIA IPOFISARIA: SINTOMATOLOGIA ALL'ESORDIO IN PAZIENTI CON NFPA

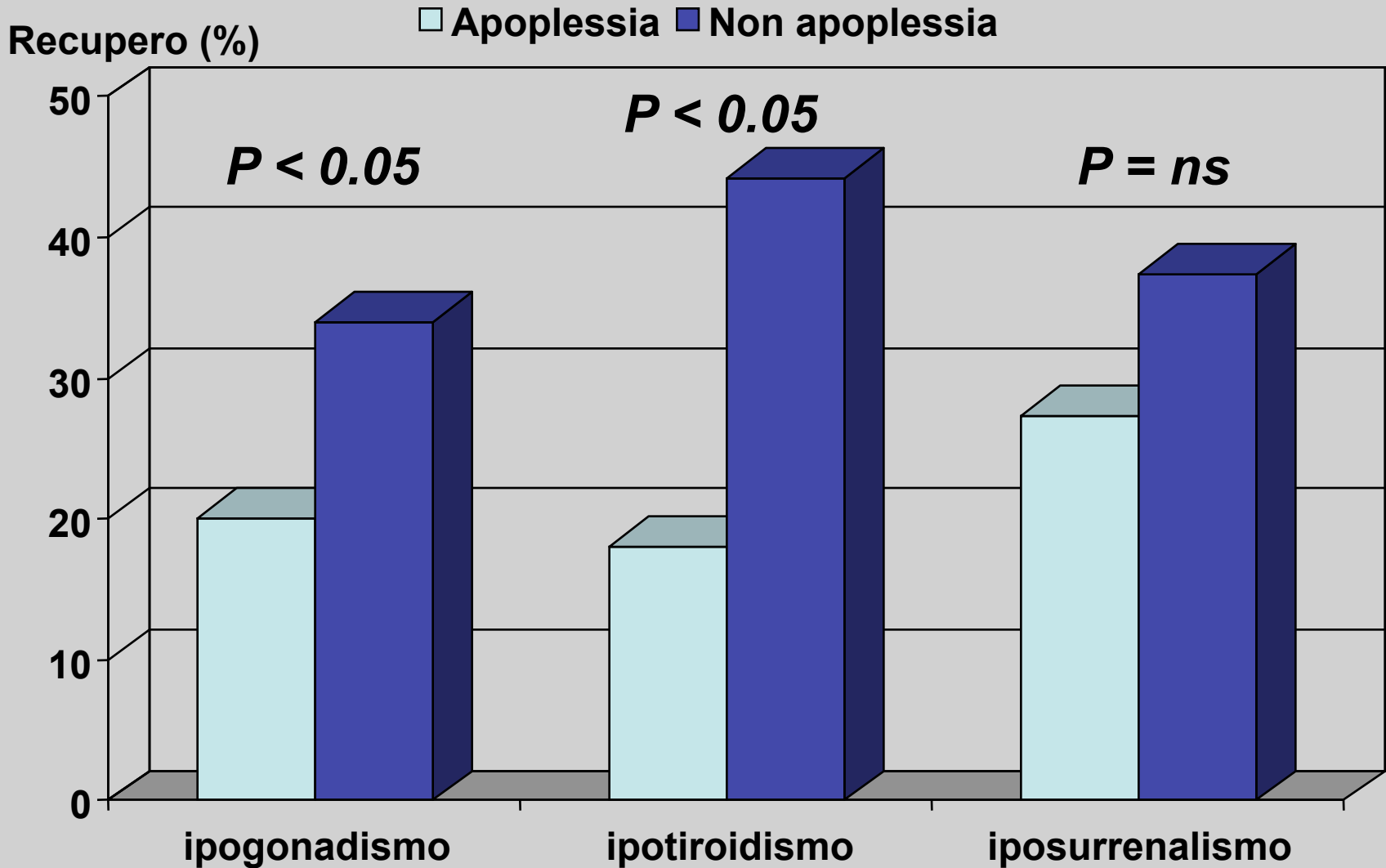


# APOPLESSIA IPOFISARIA: RECUPERO DI FUNZIONE VISIVA POSTOPERATORIA





# APOPLESSIA IPOFISARIA: RECUPERO DI FUNZIONE IPOFISARIA POSTOPERATORIA

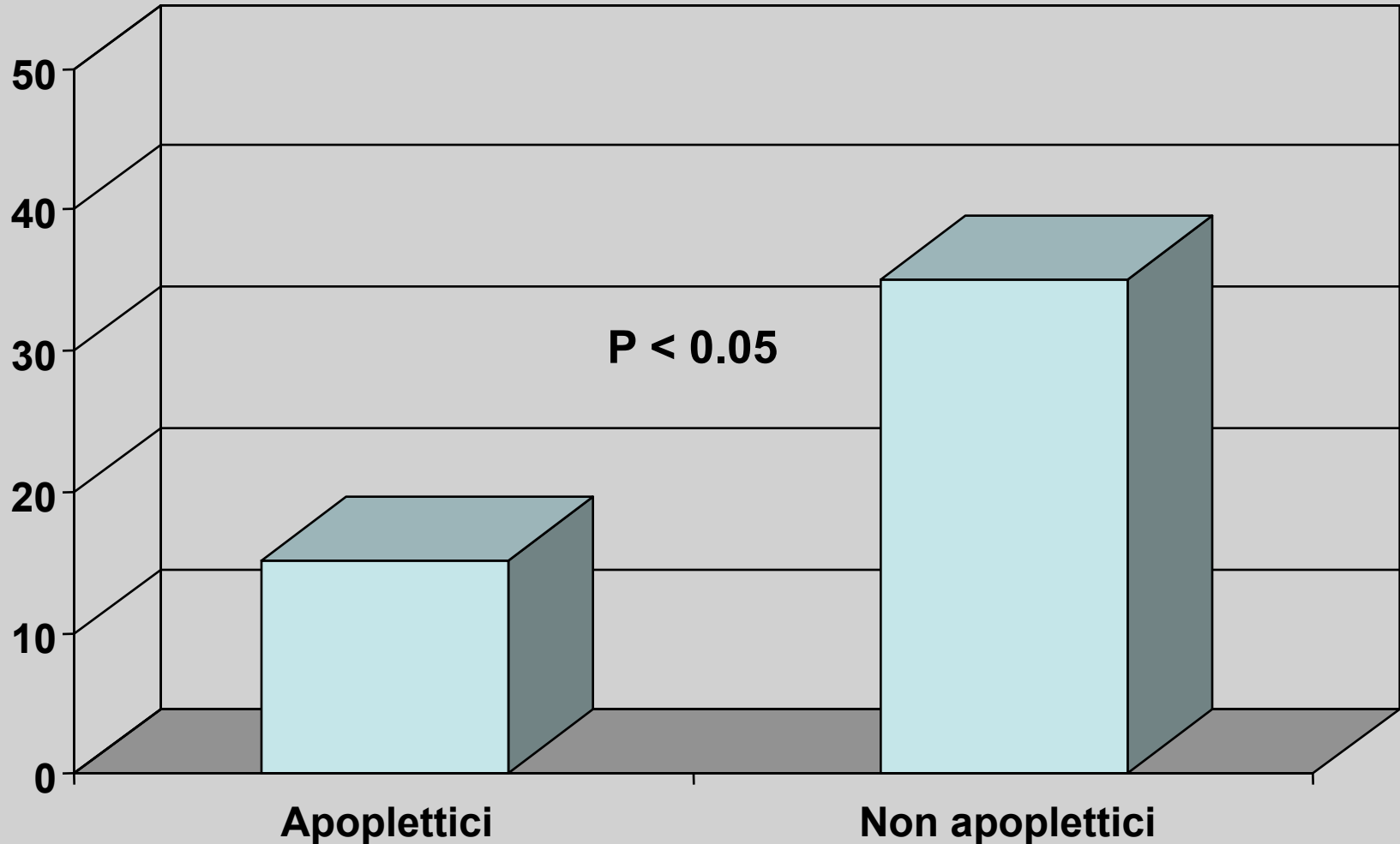


# APOPLESSIA IPOFISARIA: FREQUENZA DI RADICALITA' CHIRURGICA



% pz. con residuo

Residuo tumorale

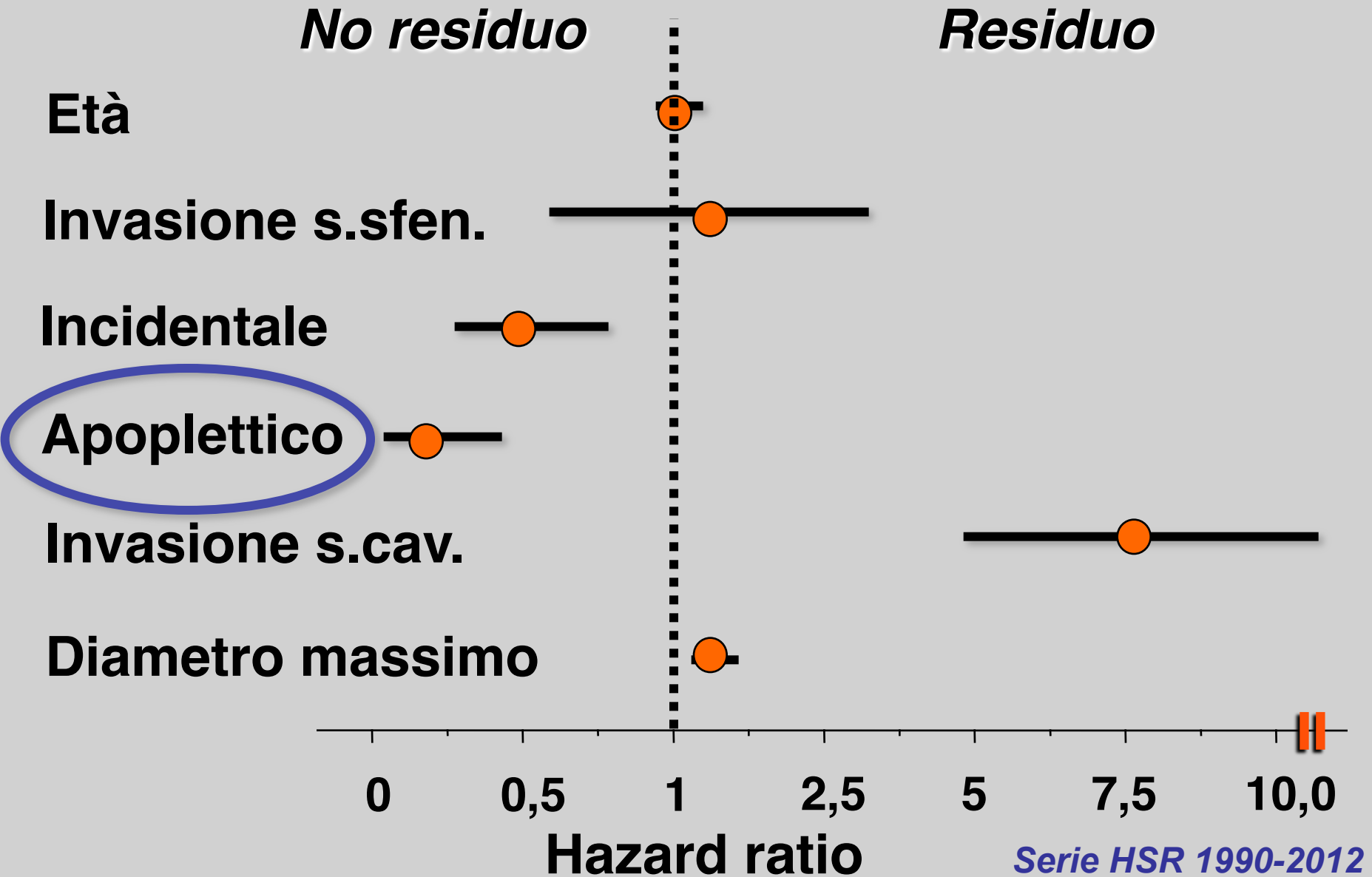




# ANALISI MULTIVARIATA DEI FATTORI PROGNOSTICI: TUMORI APOPLETTICI vs. TUMORI NON APOPLETTICI



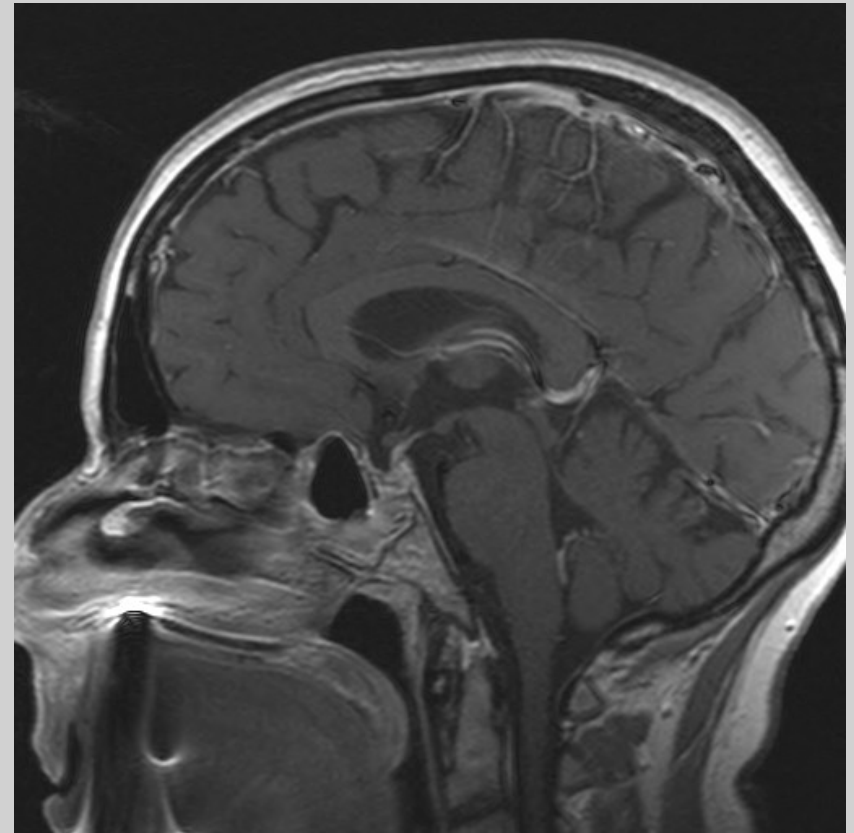
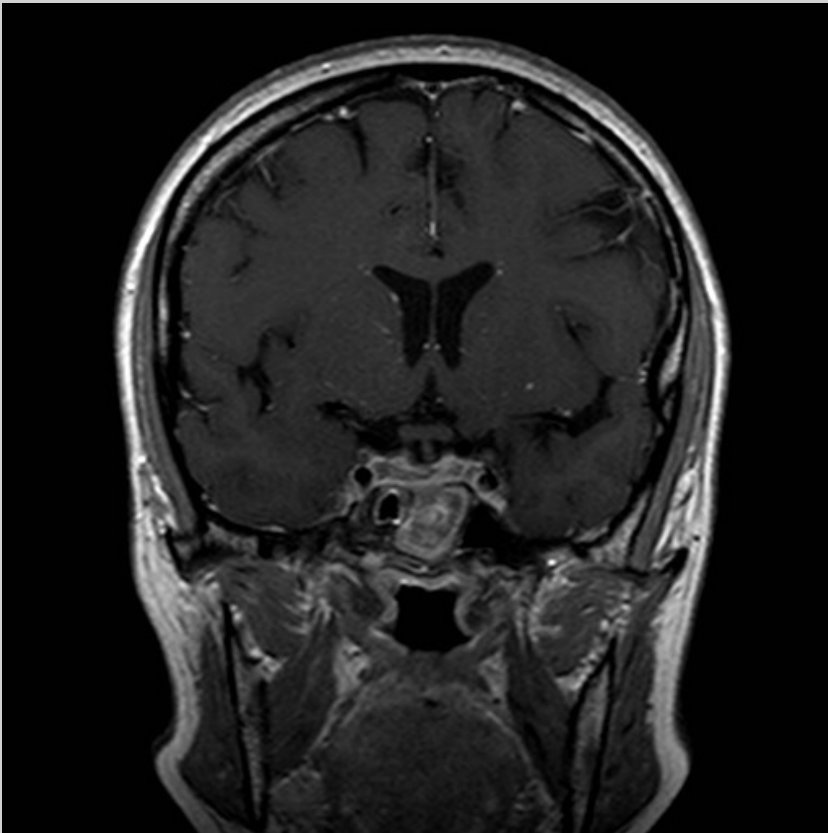
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# CASO CLINICO: ESITO POSTOPERATORIO



Assenza di residui tumorali, recupero completo della funzione visiva; normale funzione ipofisaria



# APOPLESSIA IPOFISARIA: E' NECESSARIO UN FOLLOW-UP?



**Terapia chirurgica**



**Terapia conservativa**



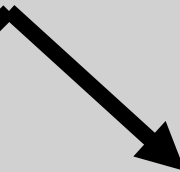
**STRETTO MONITORAGGIO RADIOLOGICO E ORMONALE**

Remissione

Persistenza



Proseguire follow-up



Remissione

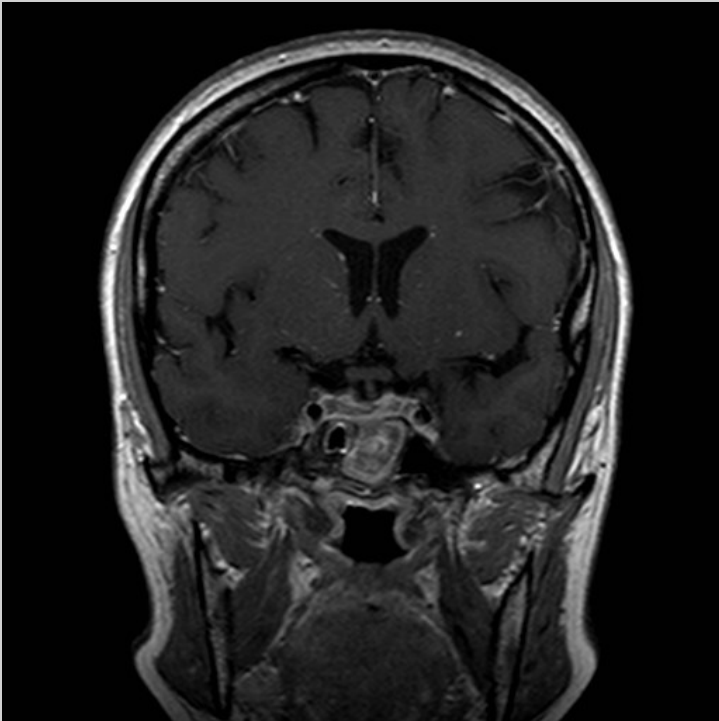
Recidiva



Ulteriore terapia

{ Medica  
 Chirurgica  
 Radiante

# APOPLESSIA IPOFISARIA: QUANDO E' NECESSARIO UN FOLLOW-UP?



I° controllo radiologico e  
ormonale  
**3-6 mesi**



Controlli successivi  
**Ogni anno x 3 anni e poi  
ogni 2 anni x almeno 10  
anni**

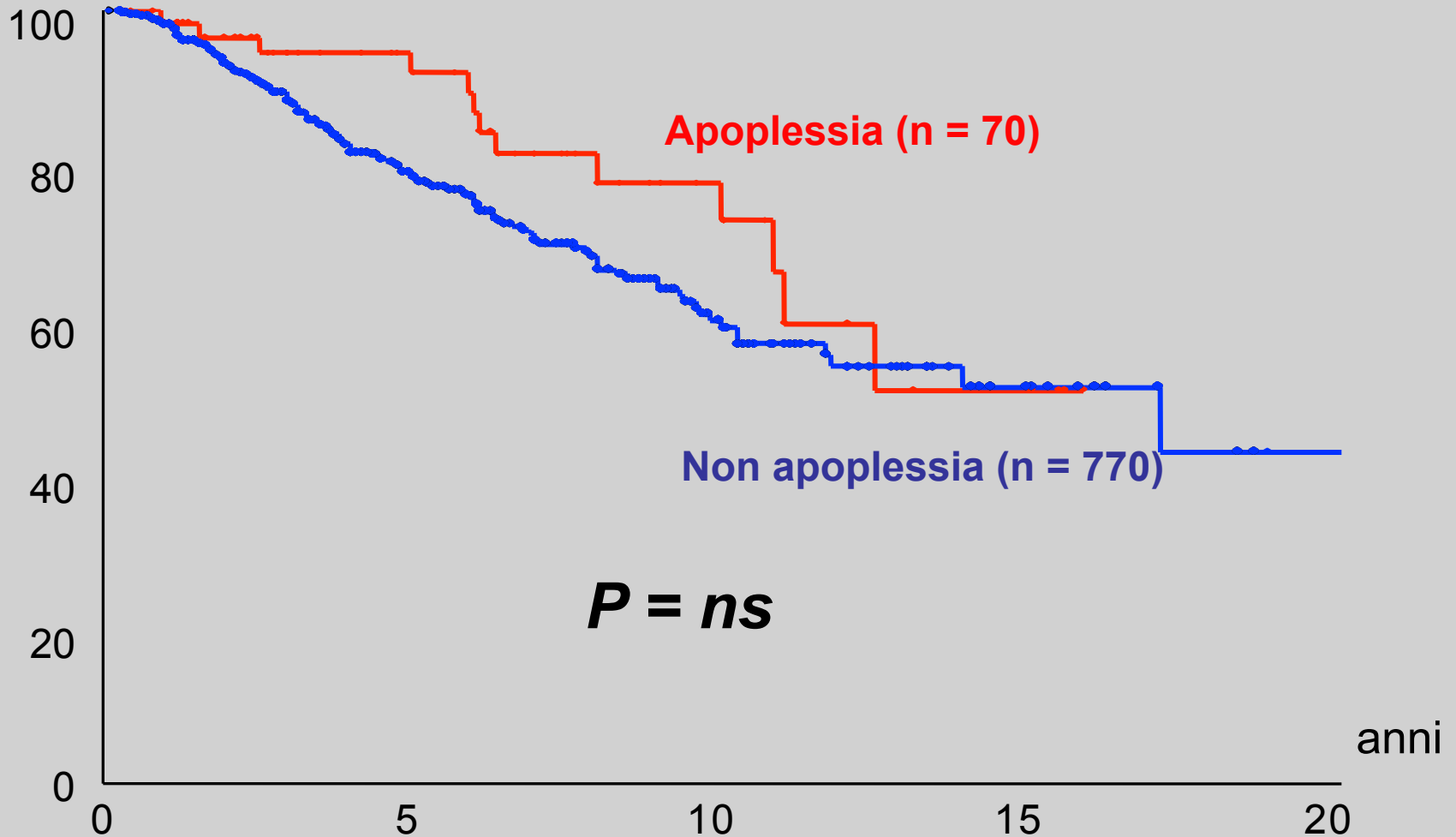


# RISCHIO DI RECIDIVA DOPO TERAPIA CHIRURGICA: PARAGONE APOPLETTICI vs. NON APOPLETTICI



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Sopravvivenza libera da recidiva (%)

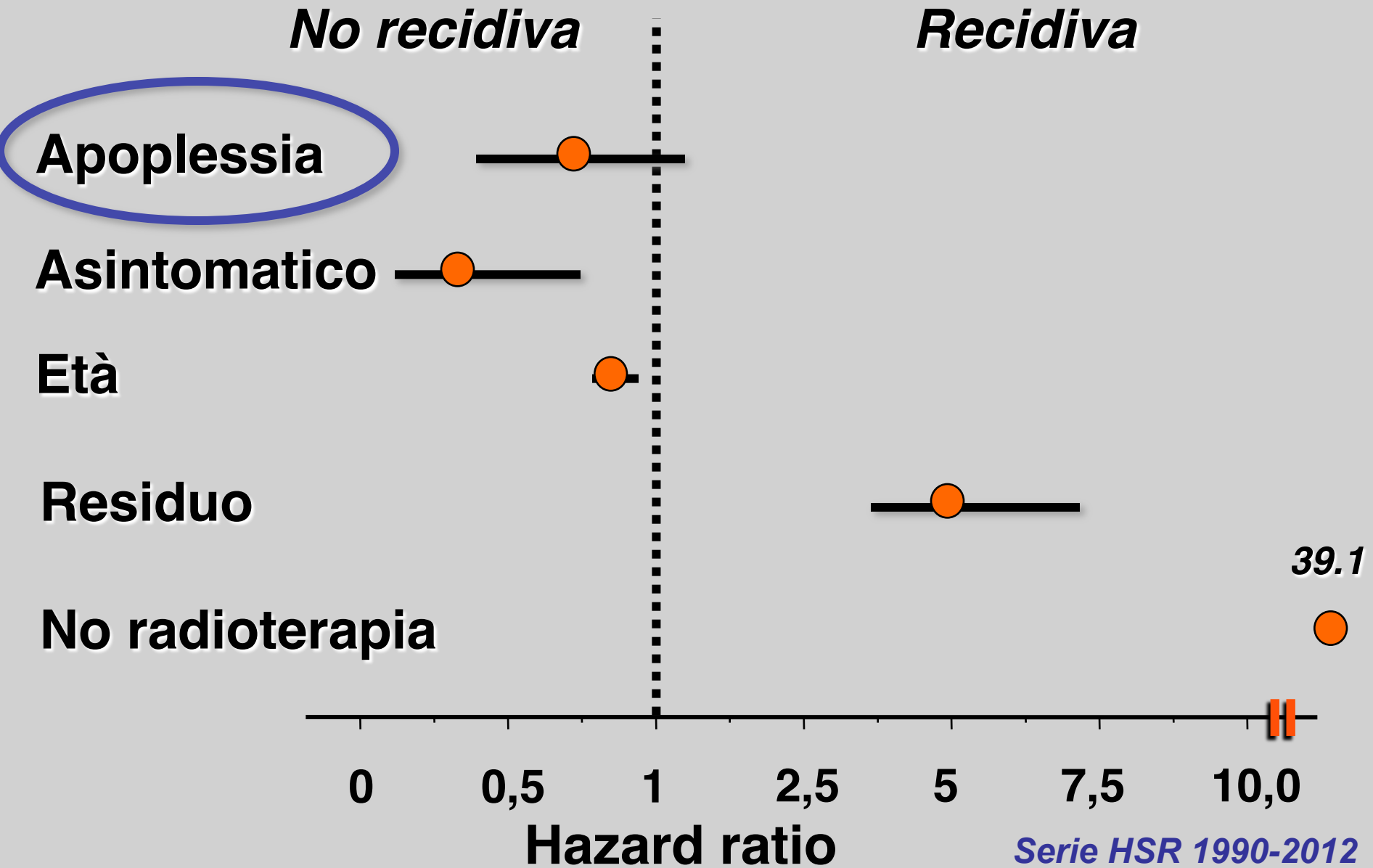




# COX ANALISI DEI FATTORI PROGNOSTICI DI RECIDIVA: TUMORI APOPLETTICI vs. TUMORI NON APOPLETTICI



Bari,  
7-10 novembre 2013








# CONCLUSIONI



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7-10 novembre 2013

-  I pazienti con apoplessia ipofisaria dovrebbero per prima cosa essere stabilizzati dal punto di vista medico e trattati con steroidi se necessario.
-  I pazienti senza deficit visivi o neurologici e quelli con segni modesti possono essere considerati candidati per una terapia conservativa.
-  In caso di gravi deficit o di peggioramento della sintomatologia, la terapia chirurgica deve essere effettuata in tempi brevi (entro pochi giorni in caso di sintomatologia grave)



**Grazie per  
l'attenzione!**