

Trattamento Chirurgico

dell' Epatocarcinoma



PAESTUM

13 14 15 Maggio 2004

CHIRURGIA RESETTIVA

Prof. N Nicoli



Regione Sicilia
U.O. Chirurgia I
A.O. "V Cervello"
Palermo

RESEZIONE EPATICA PER HCC

FEGATO CIRROTICO

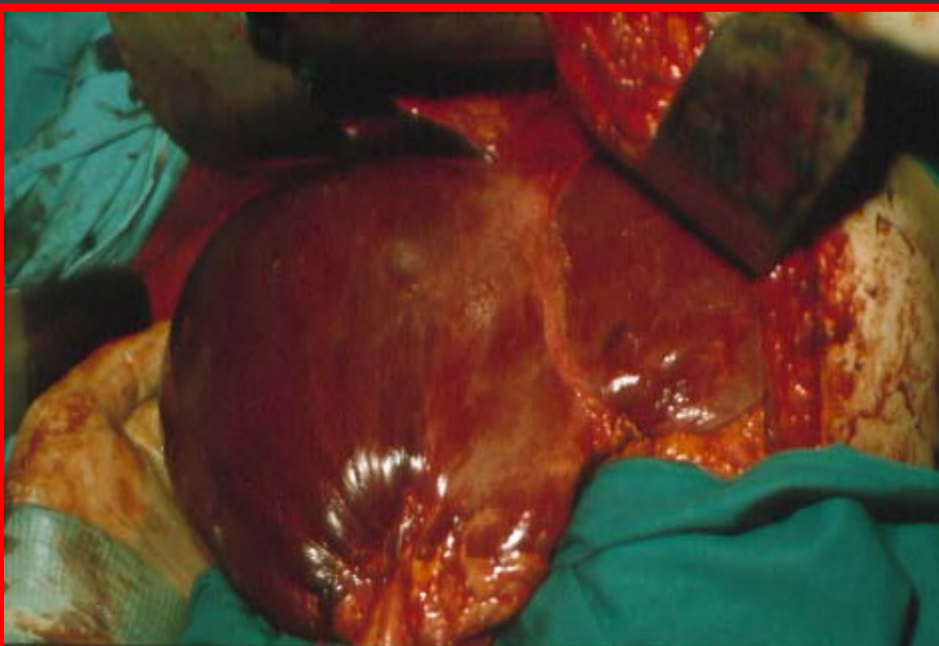
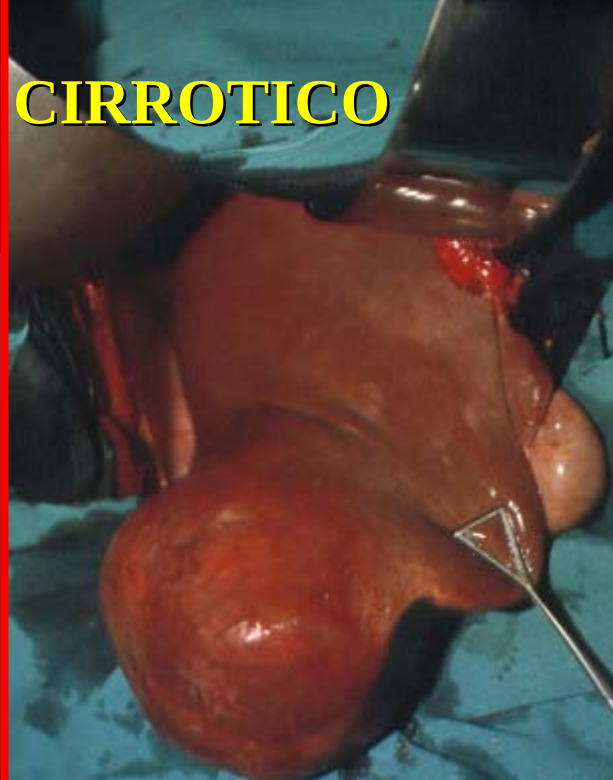
- CONCETTUALMENTE PLURIFOCALE
- DI PICCOLE DIMENSIONI (SCREENING)

FEGATO NON CIRROTICO

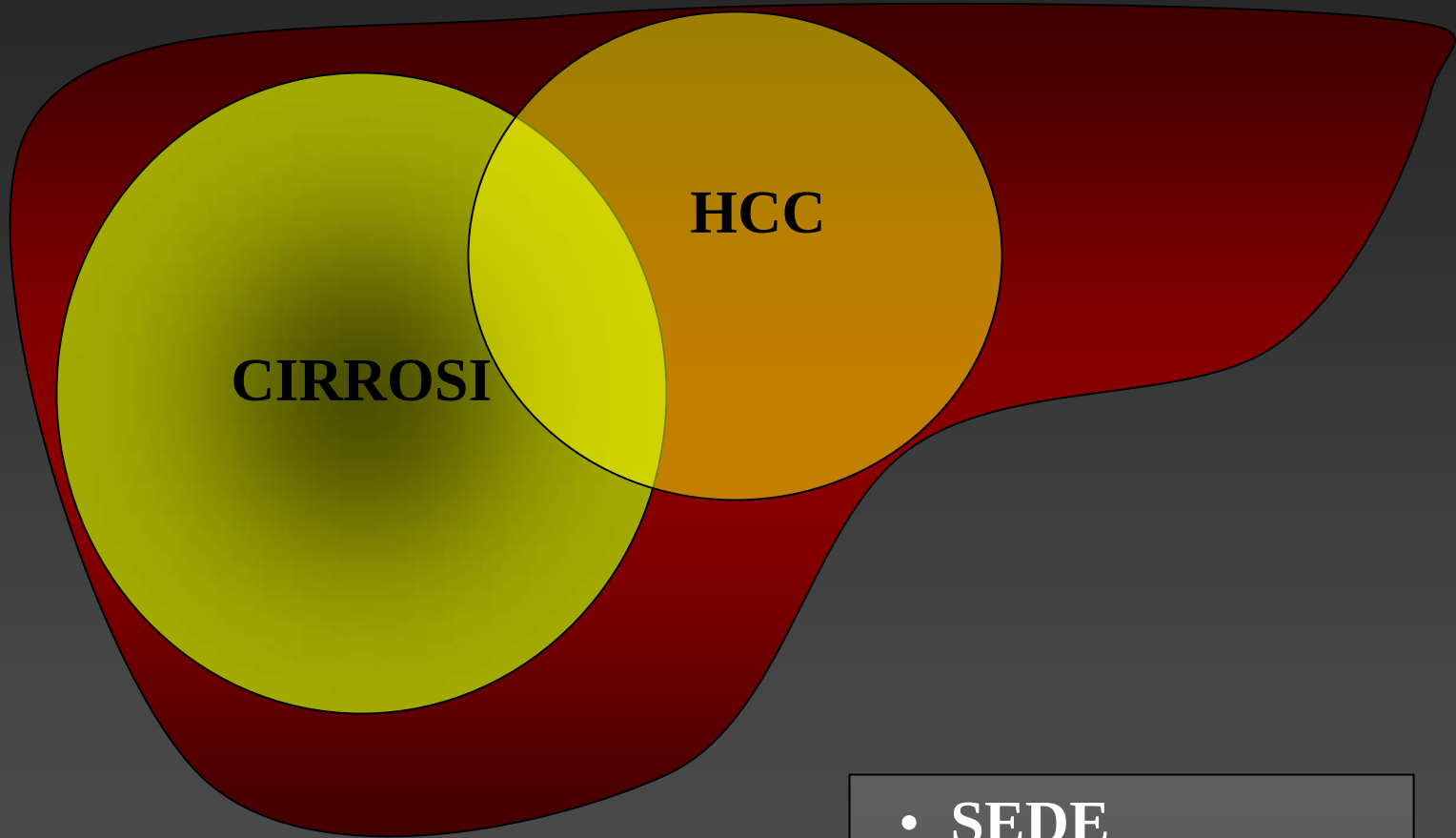
- CONCETTUALMENTE MONOFOCALE (eventuale satellitosi)
- GROSSE DIMENSIONI

26OCT77 14:06 POLICLINICO VERO
B1009 MDC VERONA ITAL

HCC IN FEGATO NON CIRROTICO



HCC IN CIRROSI



- CHILD-PUGH

- SEDE
- DIMENSIONI
- FOCALITA'

RESEZIONE EPATICA PER HCC

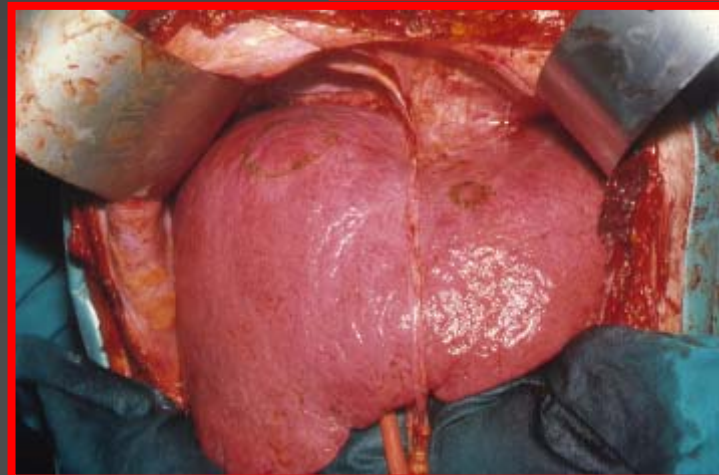
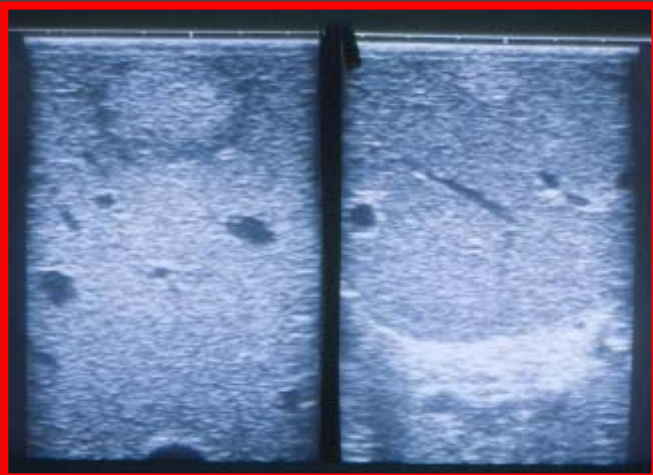
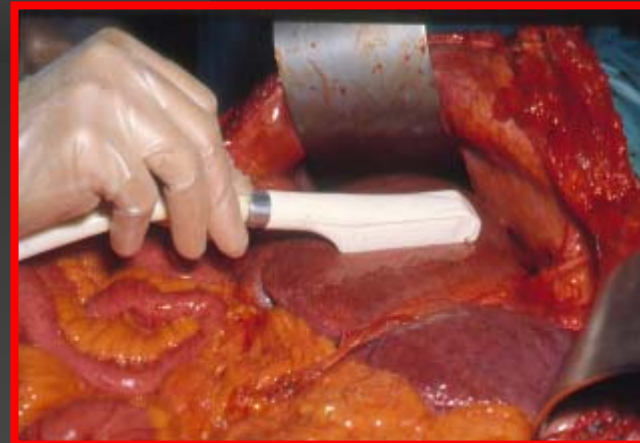
PROBLEMATICHE CHIRURGICHE

- **INDIVIDUAZIONE DELLA LESIONE**
- **TIPO DI RESEZIONE**
- **MARGINE DI RESEZIONE**
- **RIDUZIONE DELLA PERDITA EMATICA**

RESEZIONE EPATICA PER HCC

INDIVIDUAZIONE DELLA LESIONE

ECOGRAFIA
INTRAOPERATORIA



TRATTAMENTO CHIRURGICO DELL'EPATOCARCINOMA

Impact of Intraoperative Sonography on Resection and Cryoablation of Liver Tumors

Diana Gaitini, MD,¹ Doron Kopelman, MD,² Michal Soudak, MD,¹ Monica Epelman, MD,¹
Ahmad Assalia, MD,² Moshe Hashmonai, MD,² Ahuva Engel, MD¹

TABLE 1
Diagnostic Results of IOUS

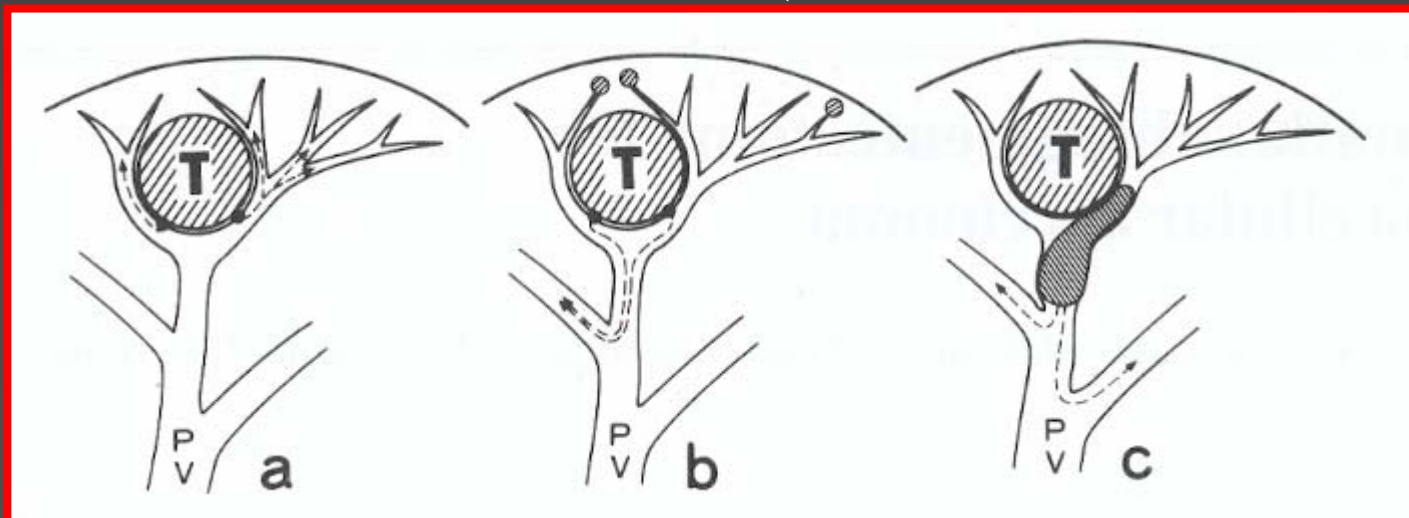
Result of IOUS	No. Patients
IOUS detected new lesion(s), undetected preoperatively	7 (17.5%)
2-3 mm diameter	4
Deeply located	1
Small, subcapsular	2
Preoperatively known lesion defined by IOUS as unresectable	4 (10%)
Vascular proximity or invasion	3
Diaphragmatic invasion	1
IOUS ruled out suspected tumor	4 (10%)
Perfusion defect on CTAP	2
Lesion on CT and US diagnosed as cyst on IOUS	2
IOUS defined tumor boundaries not clearly seen preoperatively	8 (20%)
IOUS yielded no new information	17 (42.5%)

Abbreviations: IOUS, intraoperative sonography; CTAP, CT arterial portography; US, sonography.

RESEZIONE EPATICA PER HCC

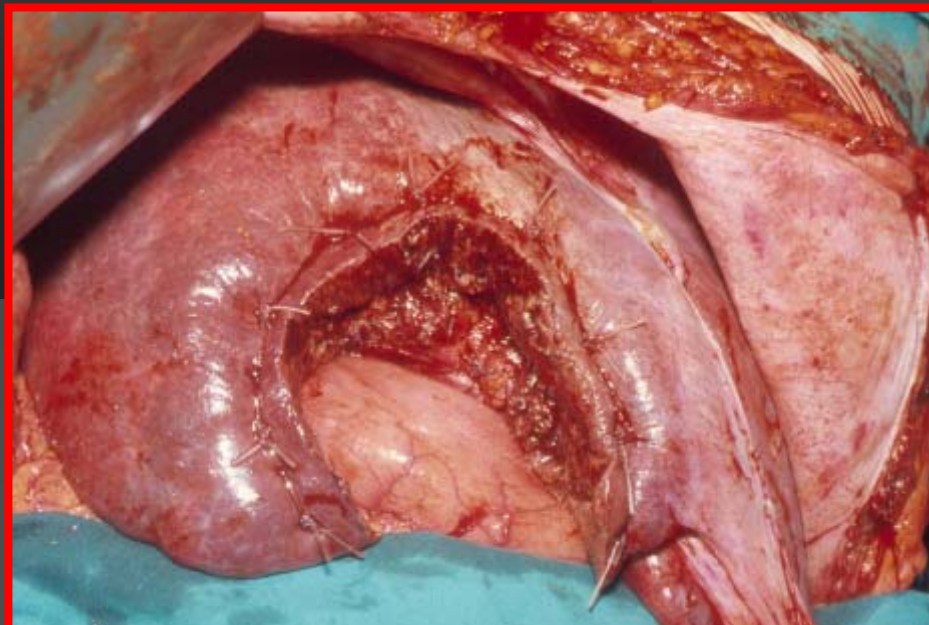
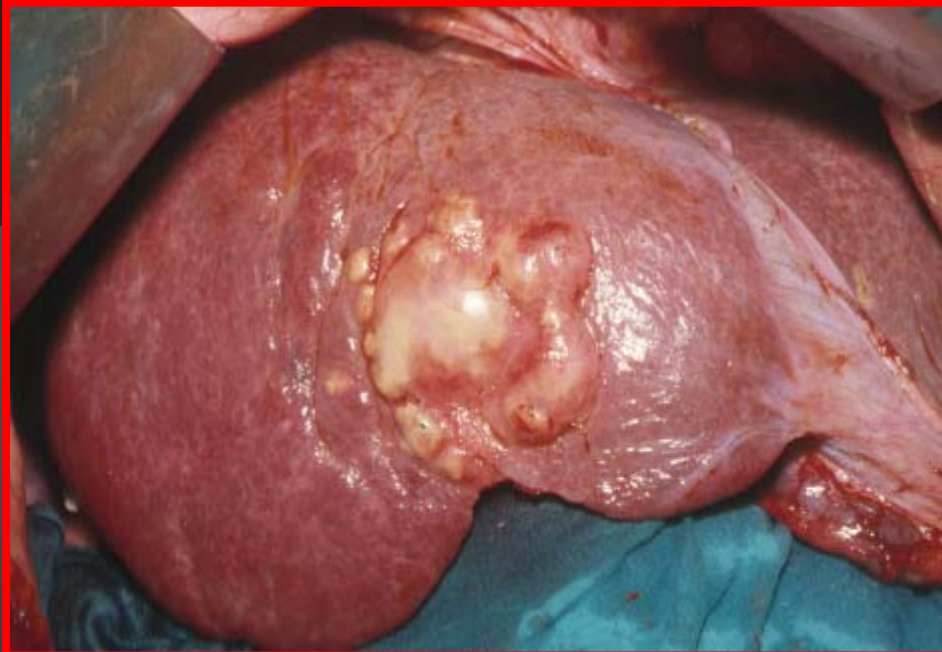
TIPO DI RESEZIONE

RESEZIONE ANATOMICA (SEGMENTECTOMIA/E)



10-JAN-90
12:12:43
DA1:270
SCAN 32

TI 3
KV 125
AS 23
SL 8
GT 0



RESEZIONE EPATICA PER HCC

MARGINE DI RESEZIONE



≥ 1 cm

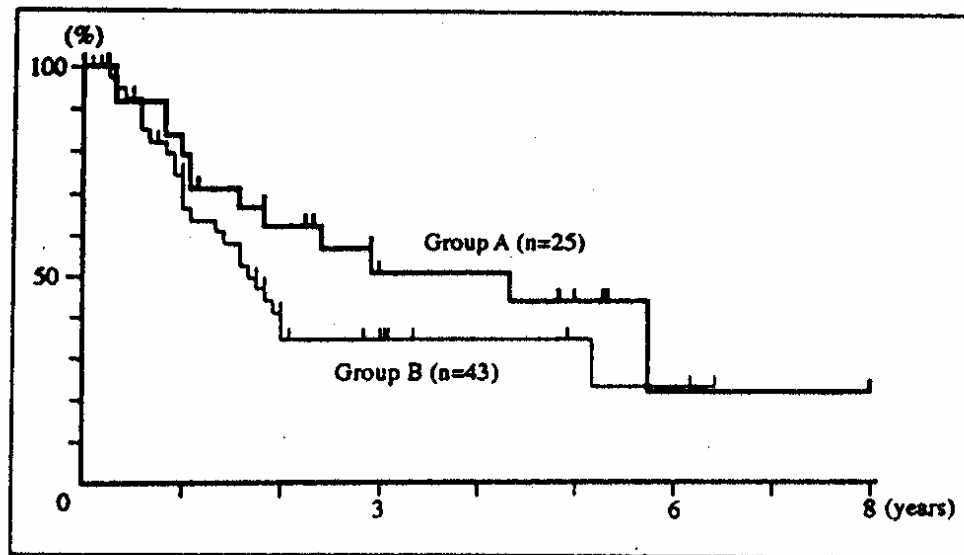


FIGURE 1 Cumulative disease-free survival.

Recurrences and Recurrence in Both Groups

Group B
n, (Surgical margin,
>0mm) n=43 p*

Recurrence
Recurrence at the
stump (associated
with multiple
metastases)

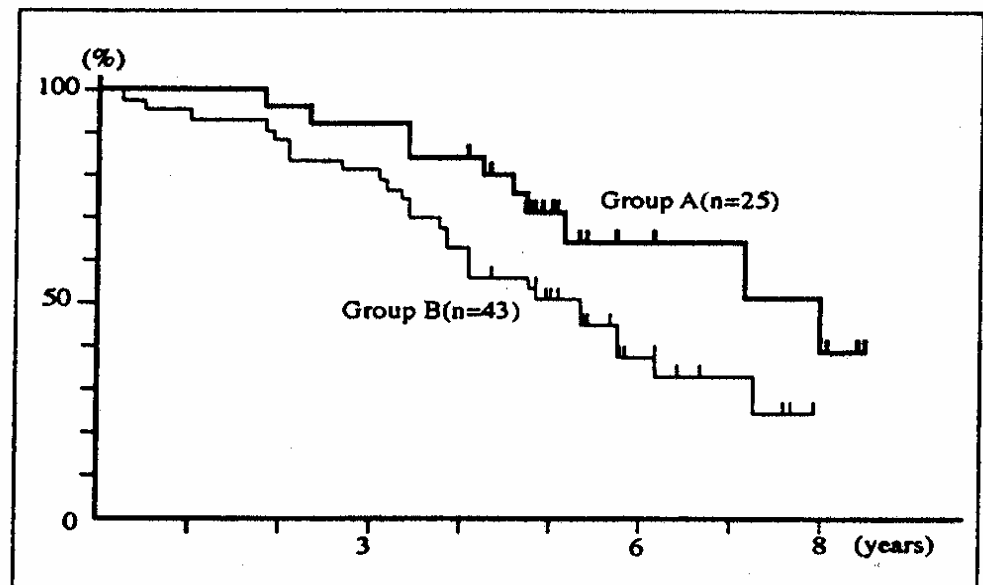


FIGURE 2 Cumulative overall survival.

Ochiai et al.

Hepato-Gastroenterol 1999

RESEZIONE EPATICA PER HCC

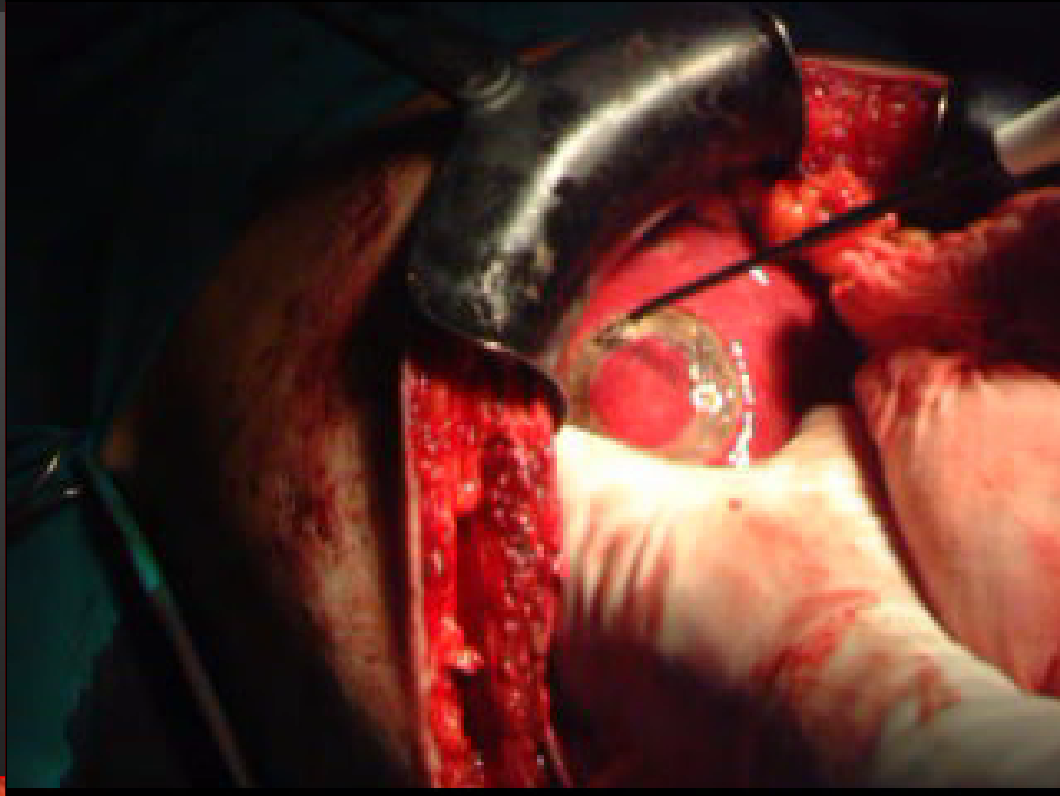
MARGINE DI RESEZIONE

```
graph TD; A[MARGINE DI RESEZIONE] --> B["≥ 1 cm"]; B --> C[TERMOABLAZIONE];
```

≥ 1 cm

TERMOABLAZIONE

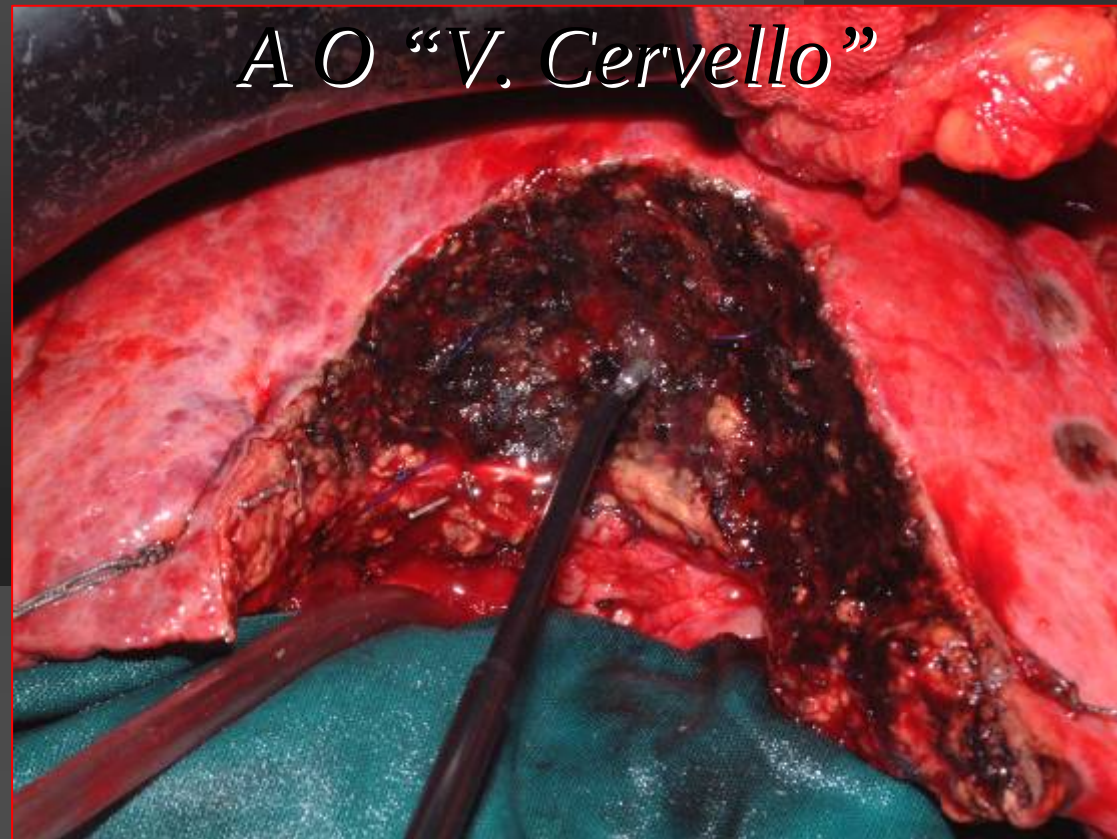
TUMORECTOMIA CON TERMOABLAZIONE (*tissuelink*®)



A O “V. Cervello”



TRATTAMENTO DELLA TRANCIA DI SEZIONE CON TERMOABLAZIONE (*tissuelink*®)



A O "V. Cervello"

RESEZIONE EPATICA PER HCC

RIDUZIONE DELLA PERDITA EMATICA

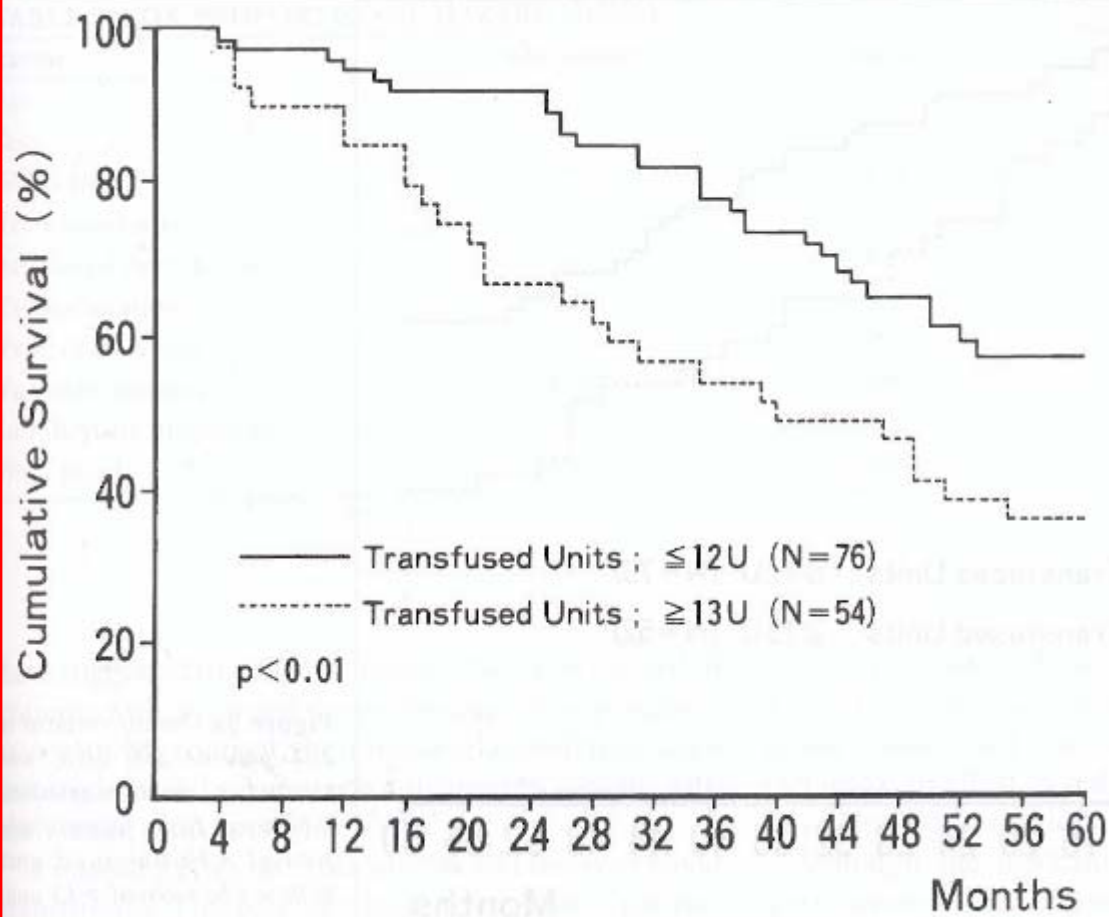
CLAMPAGGIO DEL PEDUNCOLO EPATICO
(MANOVRA DI PRINGLE)



Adverse Effect of Perioperative Blood Transfusions on Survival after Hepatic Resection for Hepatocellular Carcinoma

Jiro Fujimoto, Eizo Okamoto, Naoki Yamanaka, Tsuneo Tanaka, and Wataru Tanaka

First Department of Surgery, Hyogo College of Medicine, Nishinomiya, Hyogo, Japan



Hepato-
gastroenterology,
1997

RESEZIONE EPATICA PER HCC

INDICAZIONI ALLA CHIRURGIA RESETTIVA

HCC MONOFOCALE SE NON INDICATO OLT

CIRROSI

CHILD-PUGH A

CHILD-PUGH B

TUMORE

RESEZIONE LIMITATA

(segmentectomia,
bisegmentectomia,
tumorectomia)

TUMORECTOMIA

RESEZIONE EPATICA PER HCC

RUOLO DELLA CHIRURGIA RESETTIVA NELL'HCC MULTIFOCALE

TRATTAMENTO MULTIMODALE DELL'HCC (CHIRURGIA-RFTA I.O.-TACE)

RESEZIONE EPATICA PER HCC

INDICAZIONI ALLA CHIRURGIA RESETTIVA

HCC MULTIFOCALE

SE NON INDICATO OLT

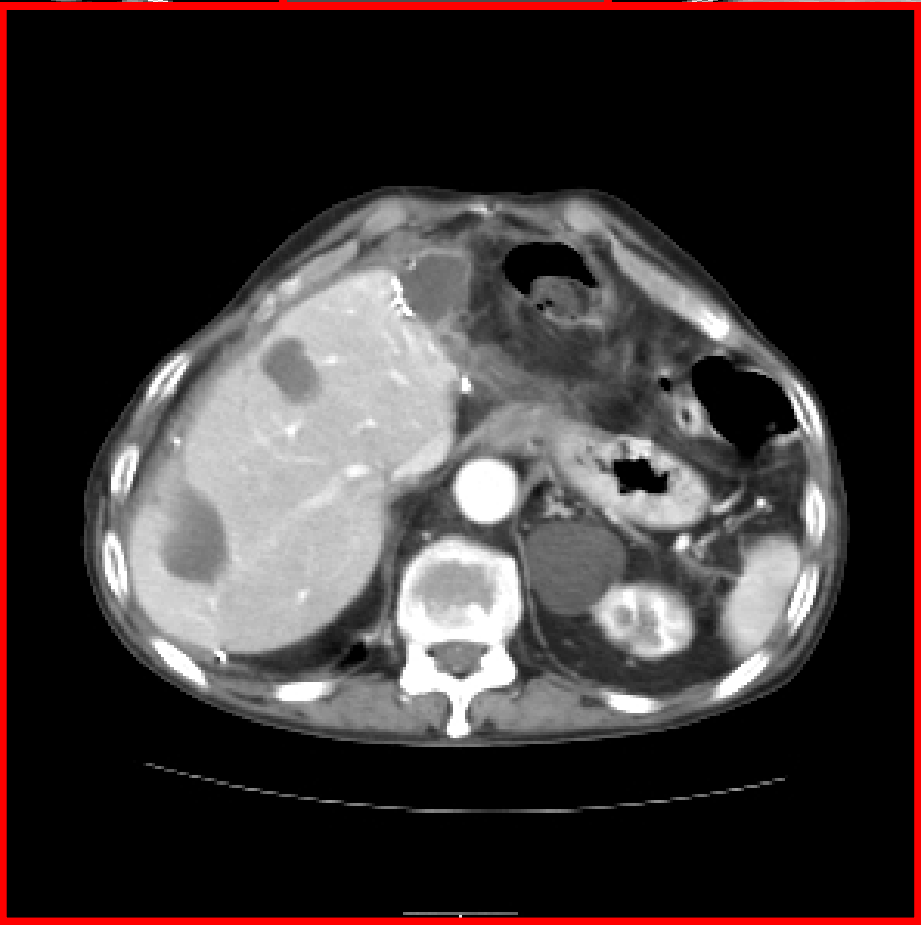
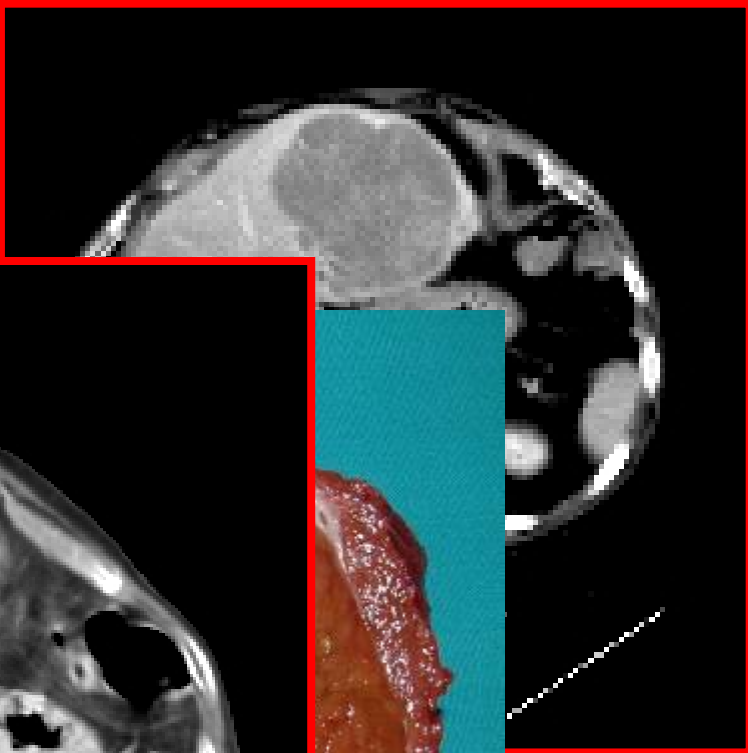
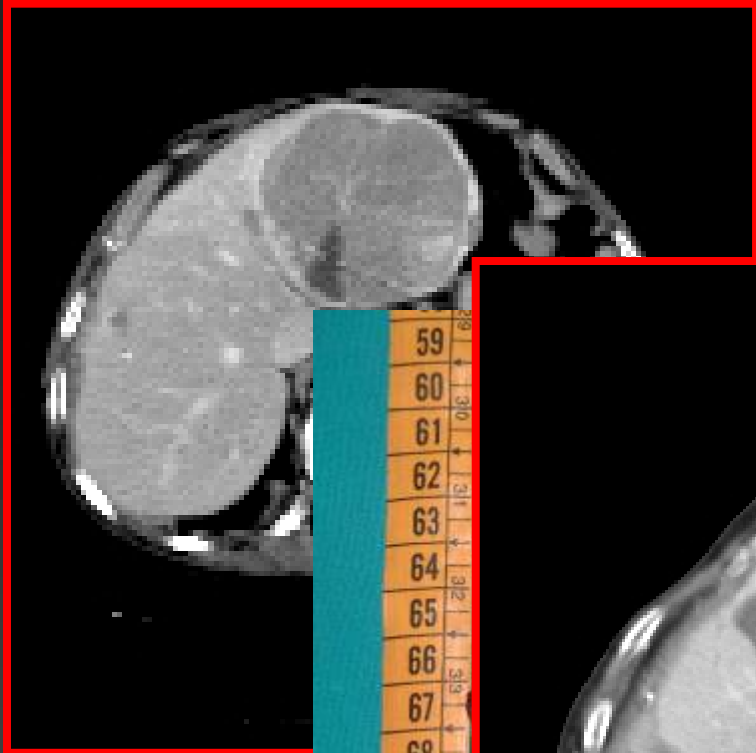
CIRROSI

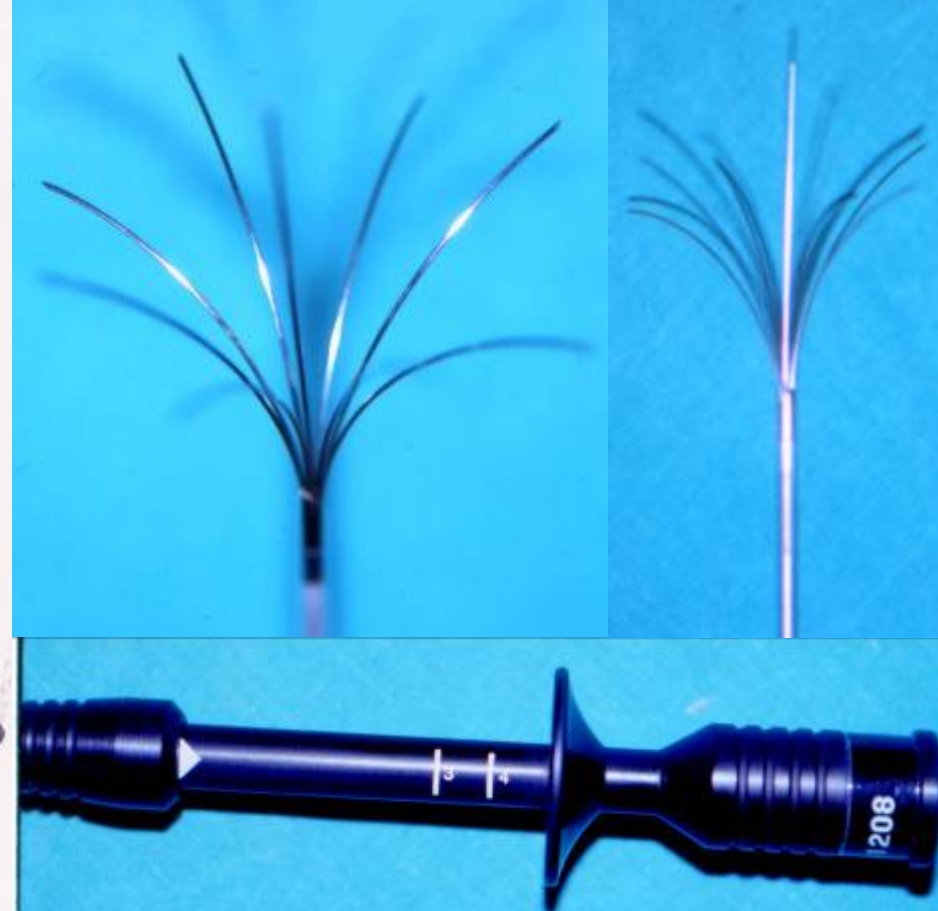
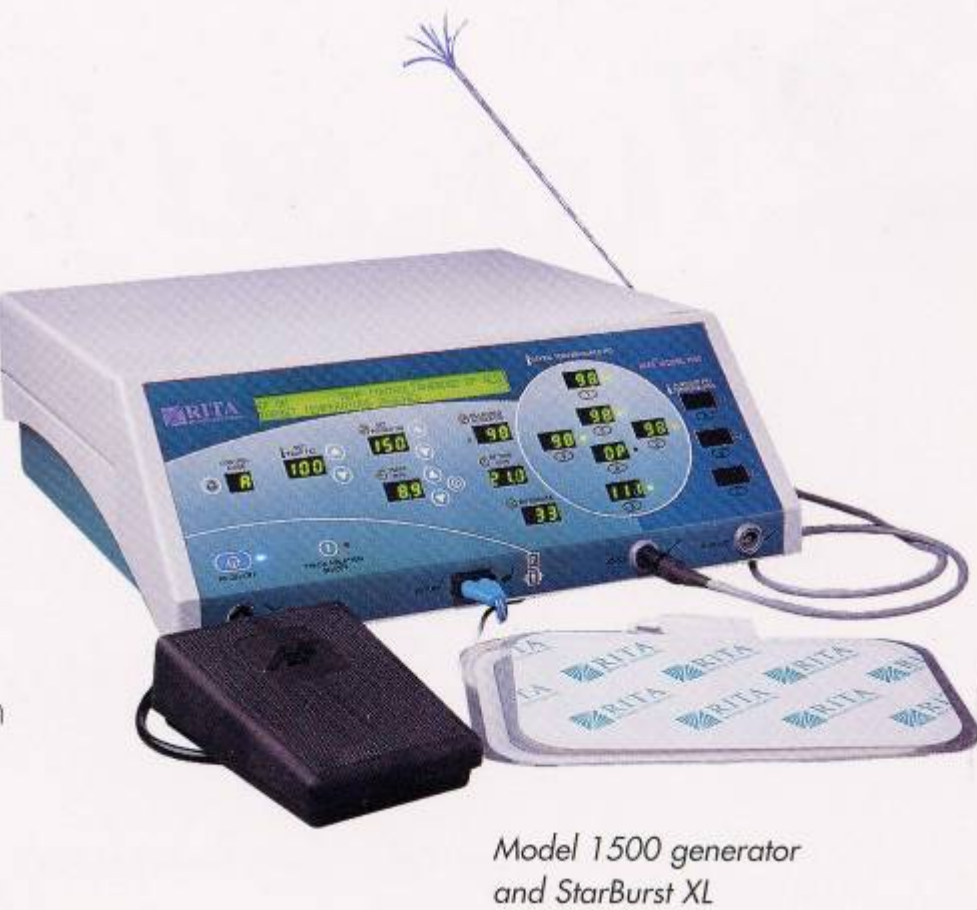
TUMORE

CHILD-PUGH A

**NODULO A CRESCITA
ESOEPATICA +
NODULO/I TRATTABILI
CON RFTA I.O.**

TACE SUCCESSIVA





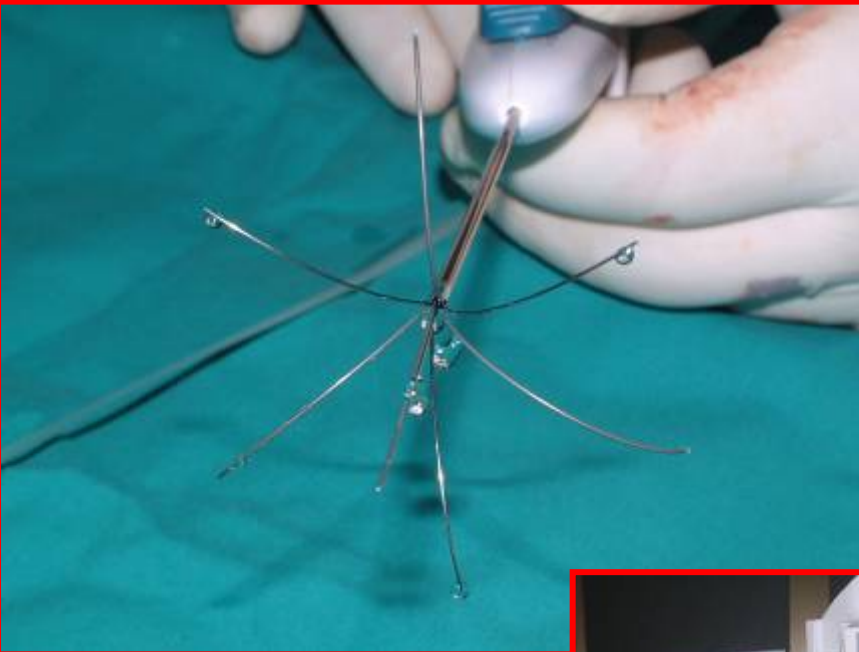
RFTA INTRA-OPERATORIA

RFTA INTRAOPERATORIA

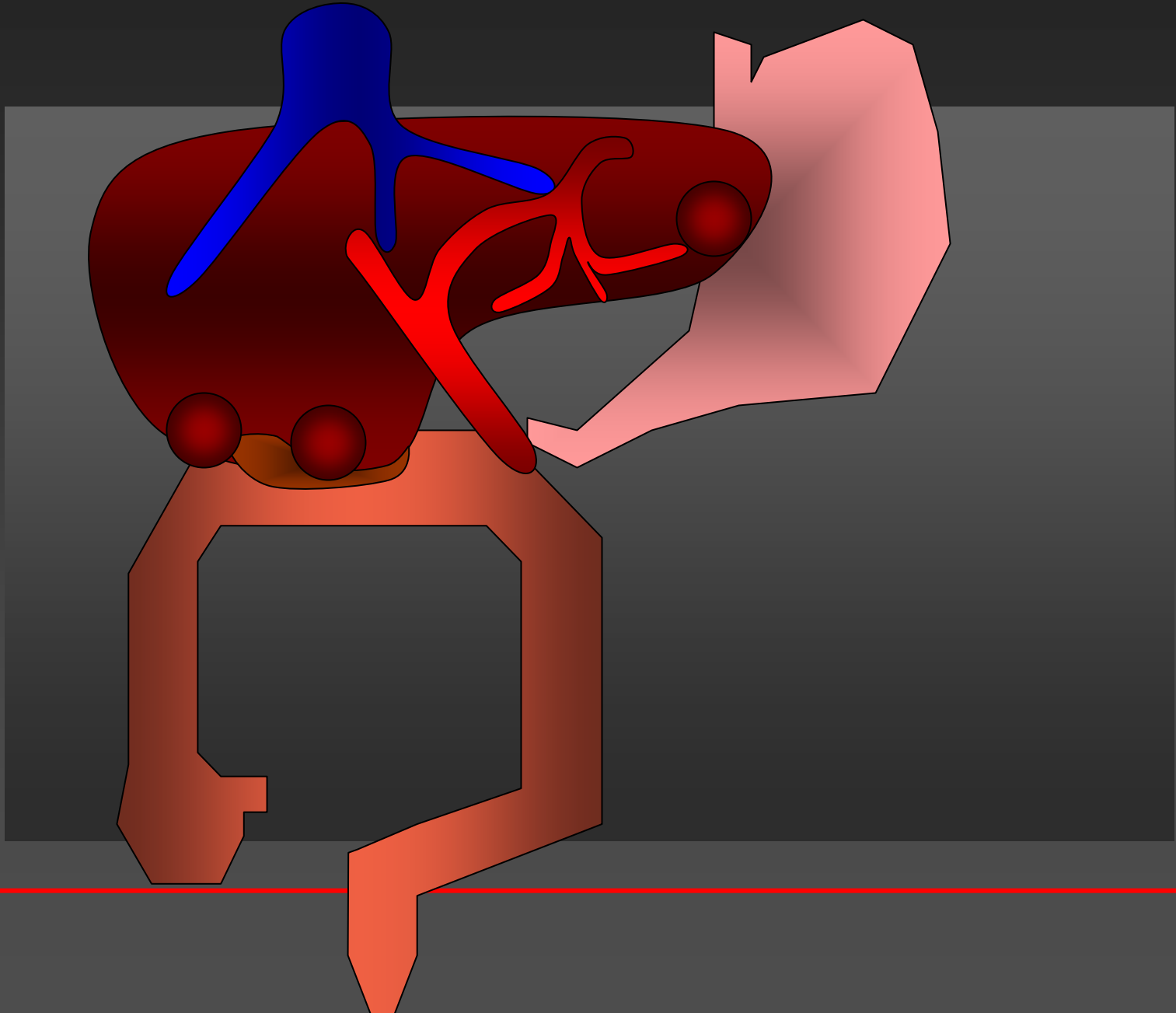
HCC MONOFOCALI

- **NODULO GIUDICATO
INTRAOPERATORIAMENTE NON
RESECABILE**
- **NODULO NON TRATTABILE CON
RFTA PERCUTANEA**

RFTA INTRAOPERATORIA



RFTA IN LAPAROSCOPIA



ALA GIOVANNI
3488 M/77y
3645-27 ARTERIOSA
-881.20 mm

Pol. Univ. P
Philips
16 Mar 2004 17:11:11
140kV, 276mAs
SC 329.0 mm
SW 3.2 mm
Z 1.31

REFTA IN LAPAROSCOPIA

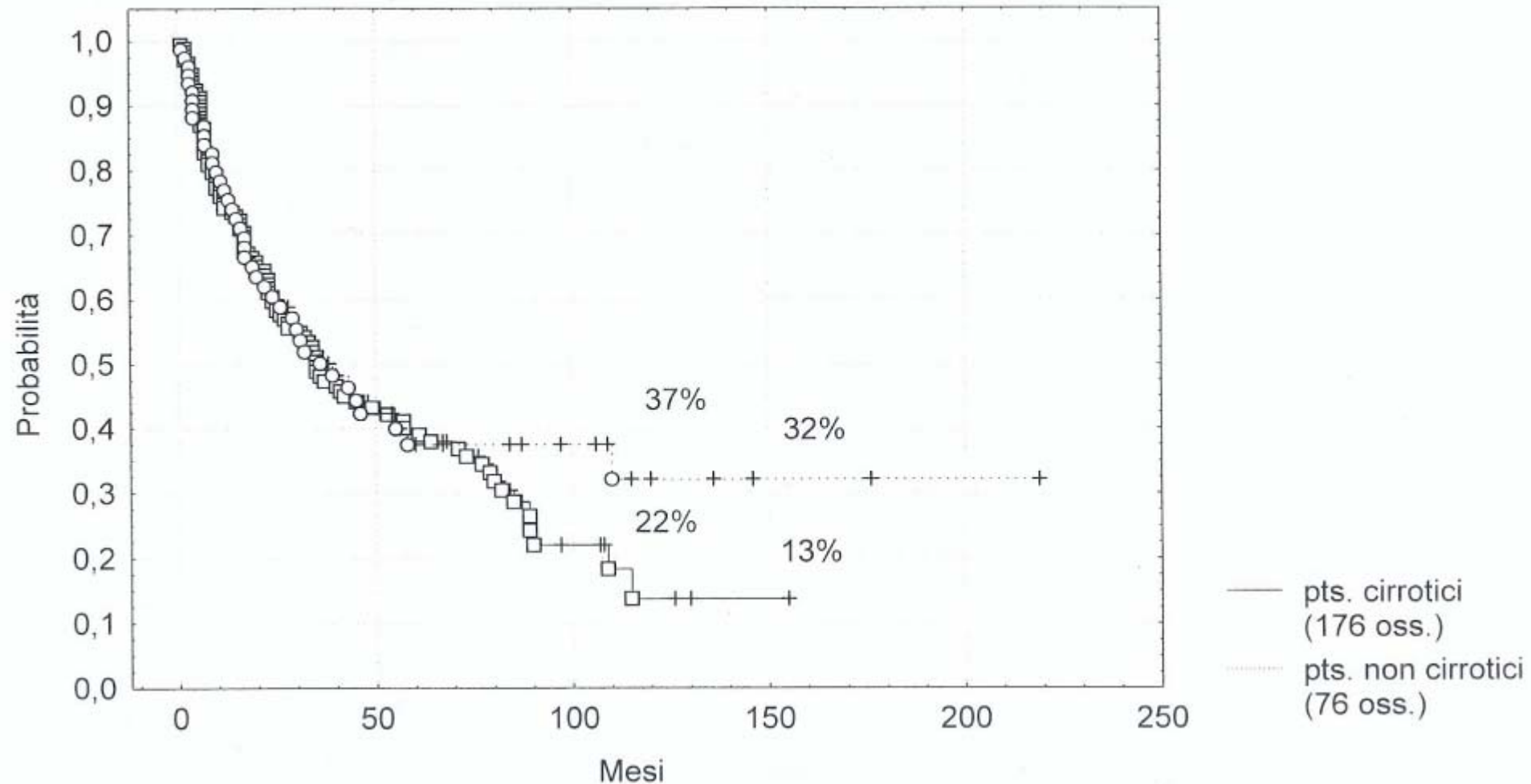


RFTA IN LAPAROSCOPIA

[illegible]

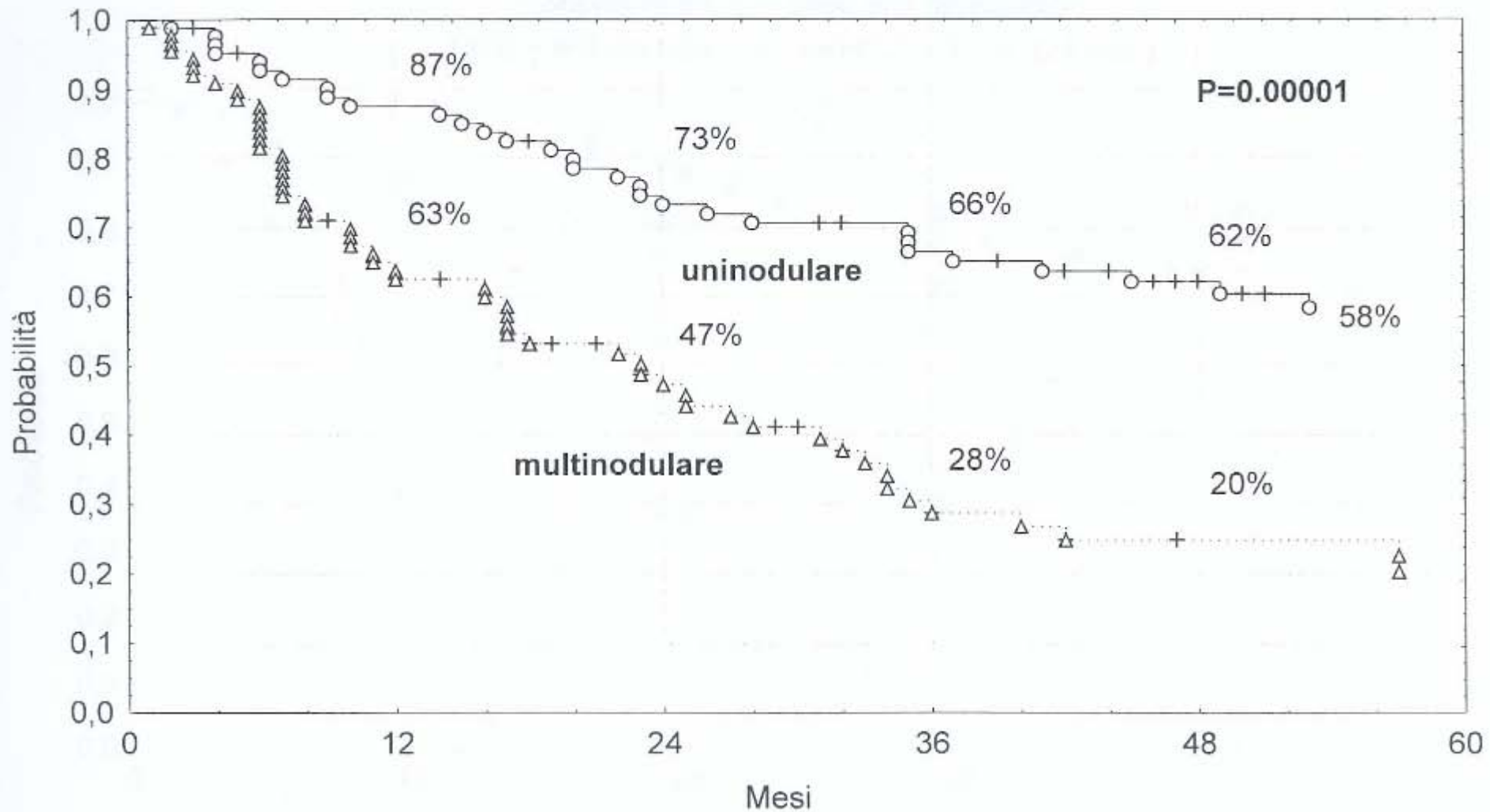
RESEZIONI EPATICHE PER HCC

PAZIENTI CIRROTICI vs NON CIRROTICI



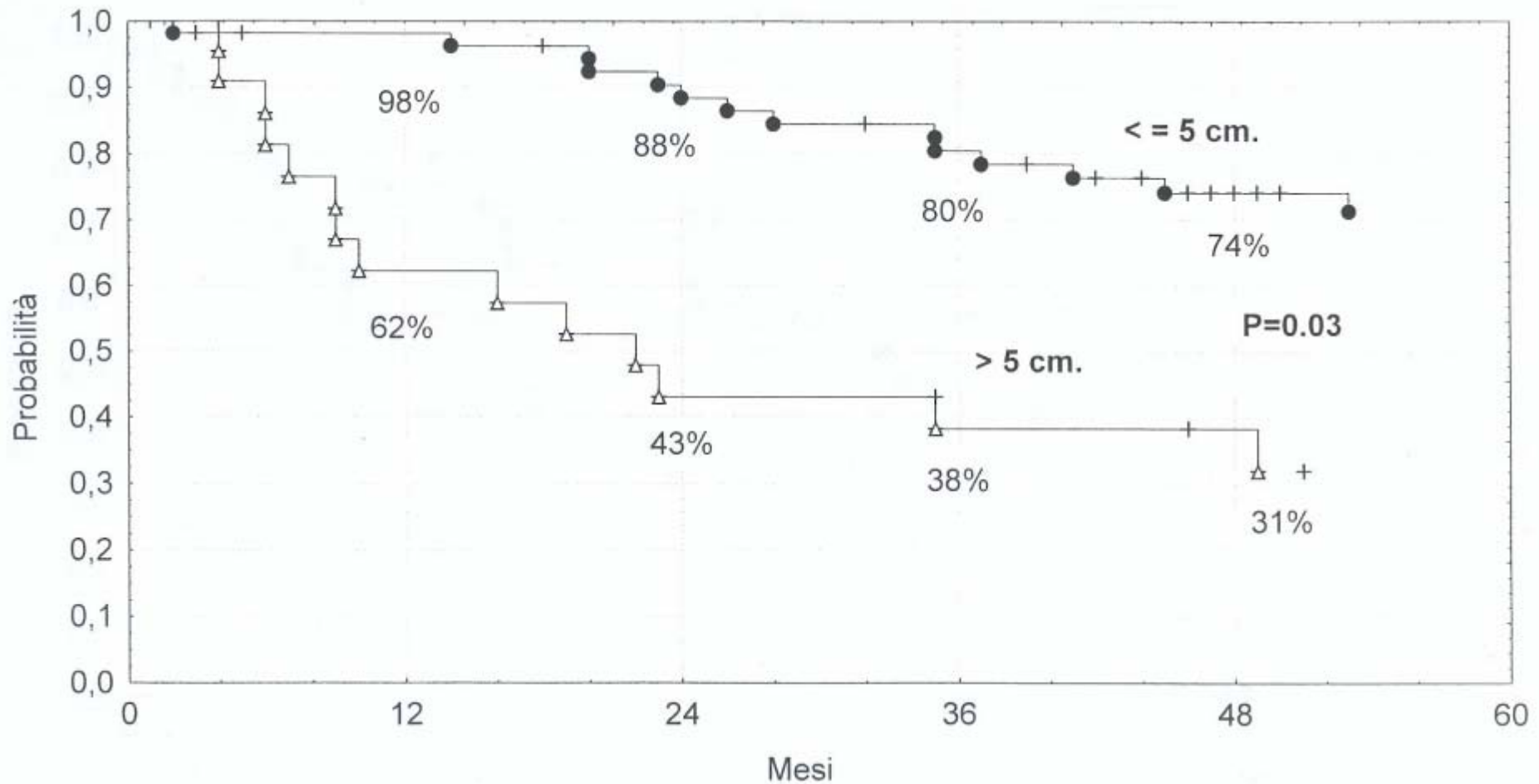
RESEZIONI EPATICHE PER HCC

CIRROTICI: UNIFOCALE vs MULTIFOCALE



RESEZIONI EPATICHE PER HCC

CIRROTICI CON HCC UNIFOCALE: < 5 cm vs > 5 cm



RESEZIONE EPATICA PER HCC

RECIDIVA EPATICA

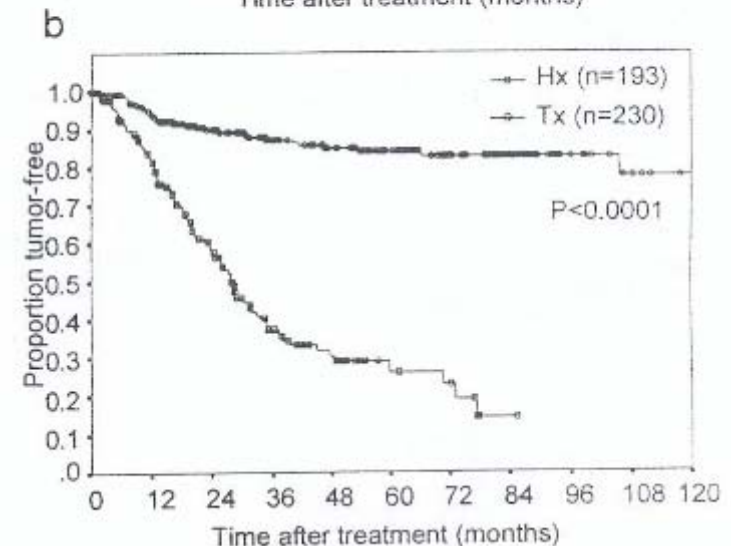
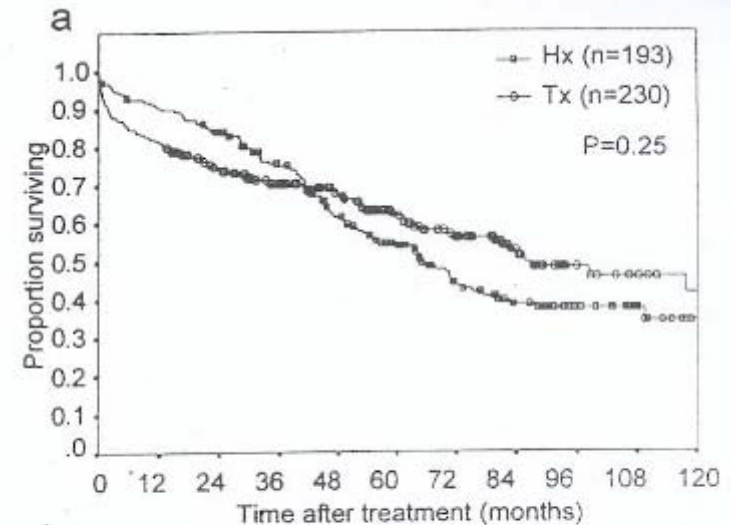
50% A 3 ANNI

70% A 5 ANNI

Llovet et al. Hepatology 2000

Bismuth et al. J Hepatol 2000

In the Hx group the patients with recurrent HCC were treated effectively with reresection (20 patients), ethanol injection (18 patients), and chemoembolization (87 patients), or a combination thereof. Conversely, the recurrent tumors in the OLTx group were widespread and rarely could be treated by regional therapy. The mean survival after tumor recurrence was 31.6 ± 21.5 months (mean $\pm$ SE) in the Hx group and 15.3 ± 14.5 months (mean $\pm$ SE) in the OLTx group ($P < 0.001$). Tumor growth under immunosuppression appeared to be accelerated.²⁸



Yamamoto, Starzl et al. Cancer 1999

RESEZIONE EPATICA PER HCC

RECIDIVA EPATICA

POSSIBILITA' TERAPEUTICHE

- RIRESEZIONE
- OLT (RESEZIONE COME BRIDGE PER OLT – Adam 2002)
- TACE
- RFTA

J Hepatobiliary Pancreat Surg (2001) 8:417–421



Treatment of recurrent hepatocellular carcinoma by radiofrequency thermal ablation

NICOLA NICOLI, ANDREA CASARIL, LUIGI MARCHIORI, GERARDO MANGIANTE, and ALÌ REZA HASHEMINIA

Department of Surgical and Gastroenterological Sciences, University of Verona, Piazza LA Scuro 37100, Verona, Italy

RESEZIONE EPATICA PER HCC

PAZIENTI CON HCC MONOFOCALE < 5 cm

1990-2000

50 PAZIENTI

```
graph TD; A[50 PAZIENTI] --> B[LIBERI DA MALATTIA  
13]; A --> C[RIPRESA EPATICA NON TRATTATA  
DECEDUTI 16  
BSC 1]; A --> D[RIPRESA EPATICA DI MALATTIA  
TRATTATA 20]
```

**LIBERI DA
MALATTIA**

13

**RIPRESA EPATICA
NON TRATTATA
DECEDUTI**

16

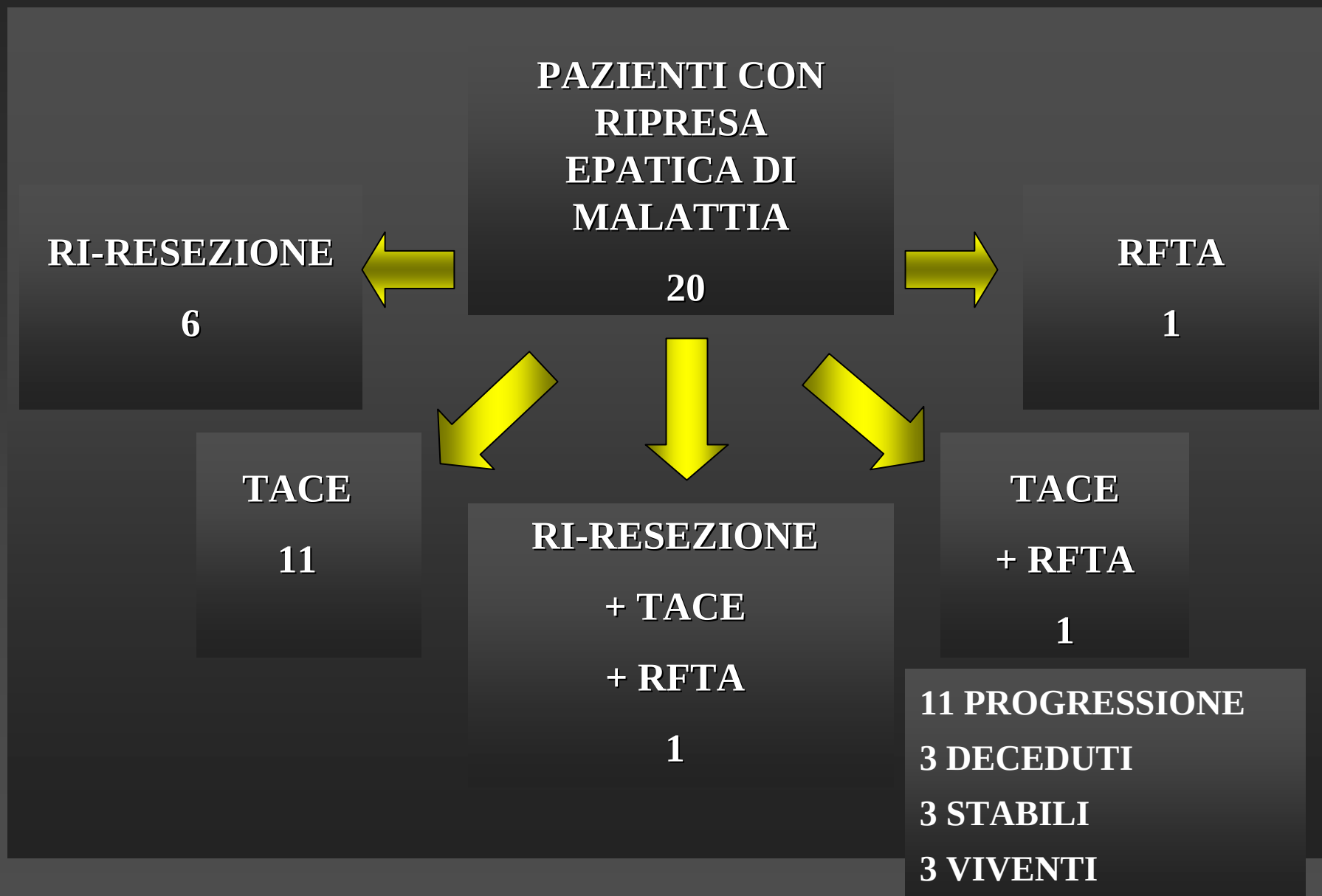
BSC 1

**RIPRESA
EPATICA DI
MALATTIA
TRATTATA**

20

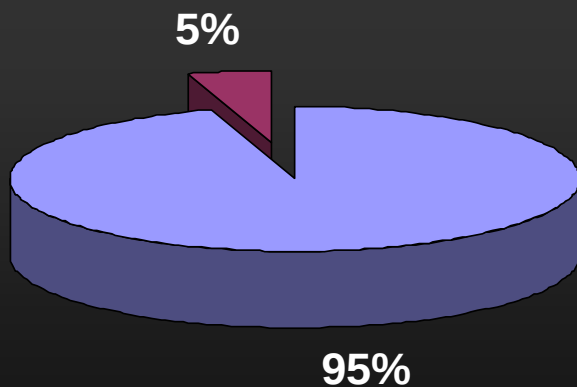
RESEZIONE EPATICA PER HCC

TRATTAMENTO DELLA RIPRESA EPATICA DI MALATTIA



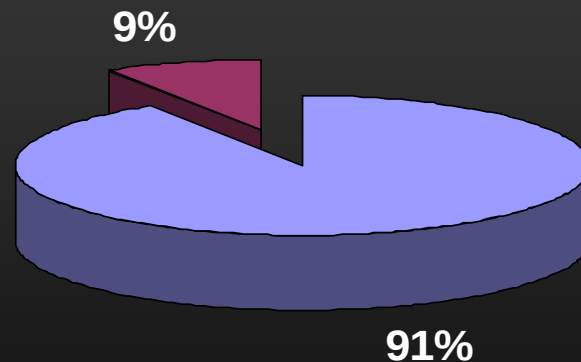
MORTALITA' OPERATORIA

PAZIENTI NON CIRROTICI



- EMORRAGIA 1
- INFARTO MIOCARDICO 2
- ALTRA 1

PAZIENTI CIRROTICI



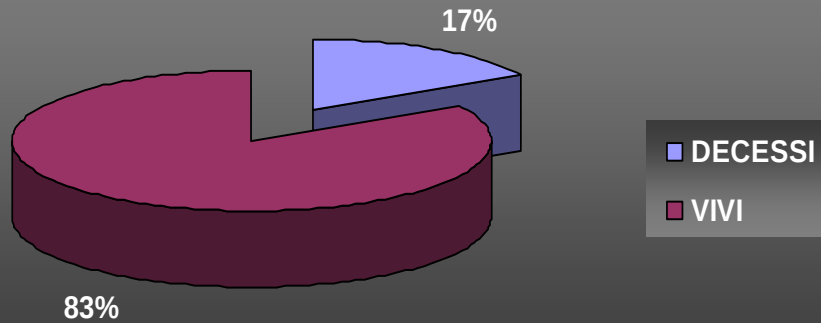
- INSUFF EPATICA 15
- INSUFF RESPIRAT. 1
- MOF 1
- SEPSI 2

MORTALITA' OPERATORIA

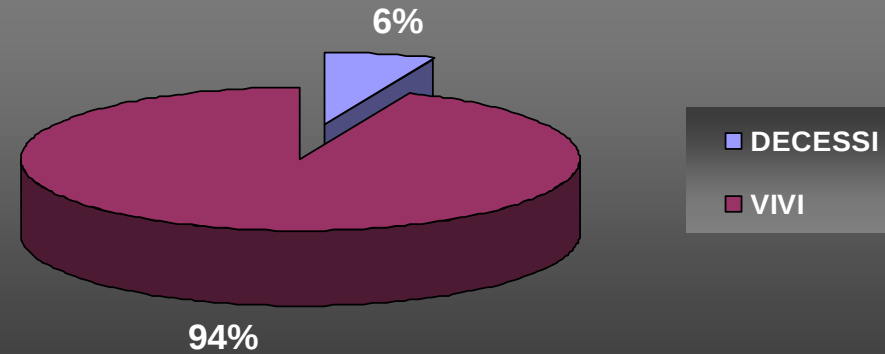
1976-1990

1990-2000

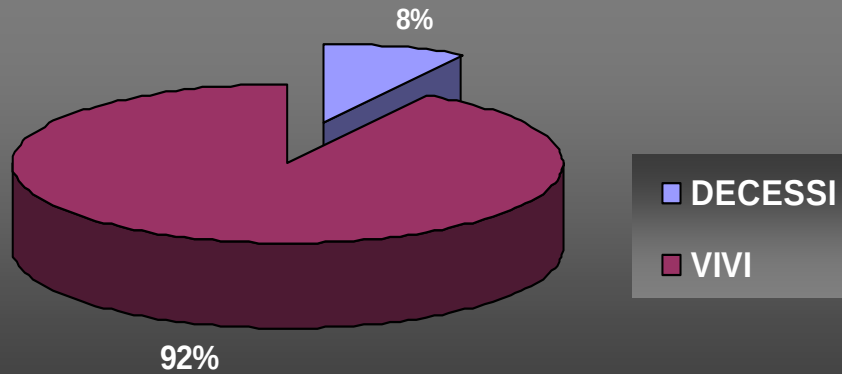
CIRROTICI 76-90



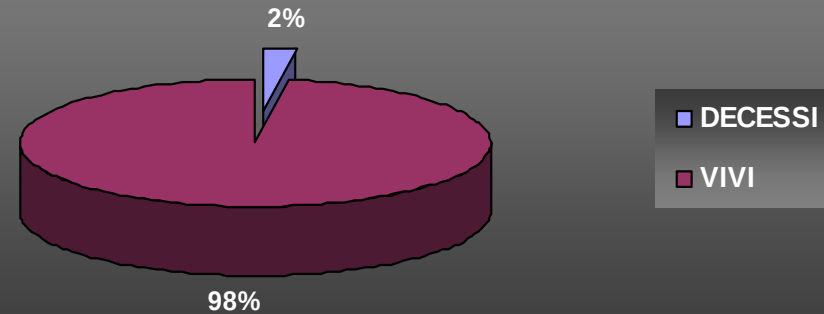
CIRROTICI 90-2000



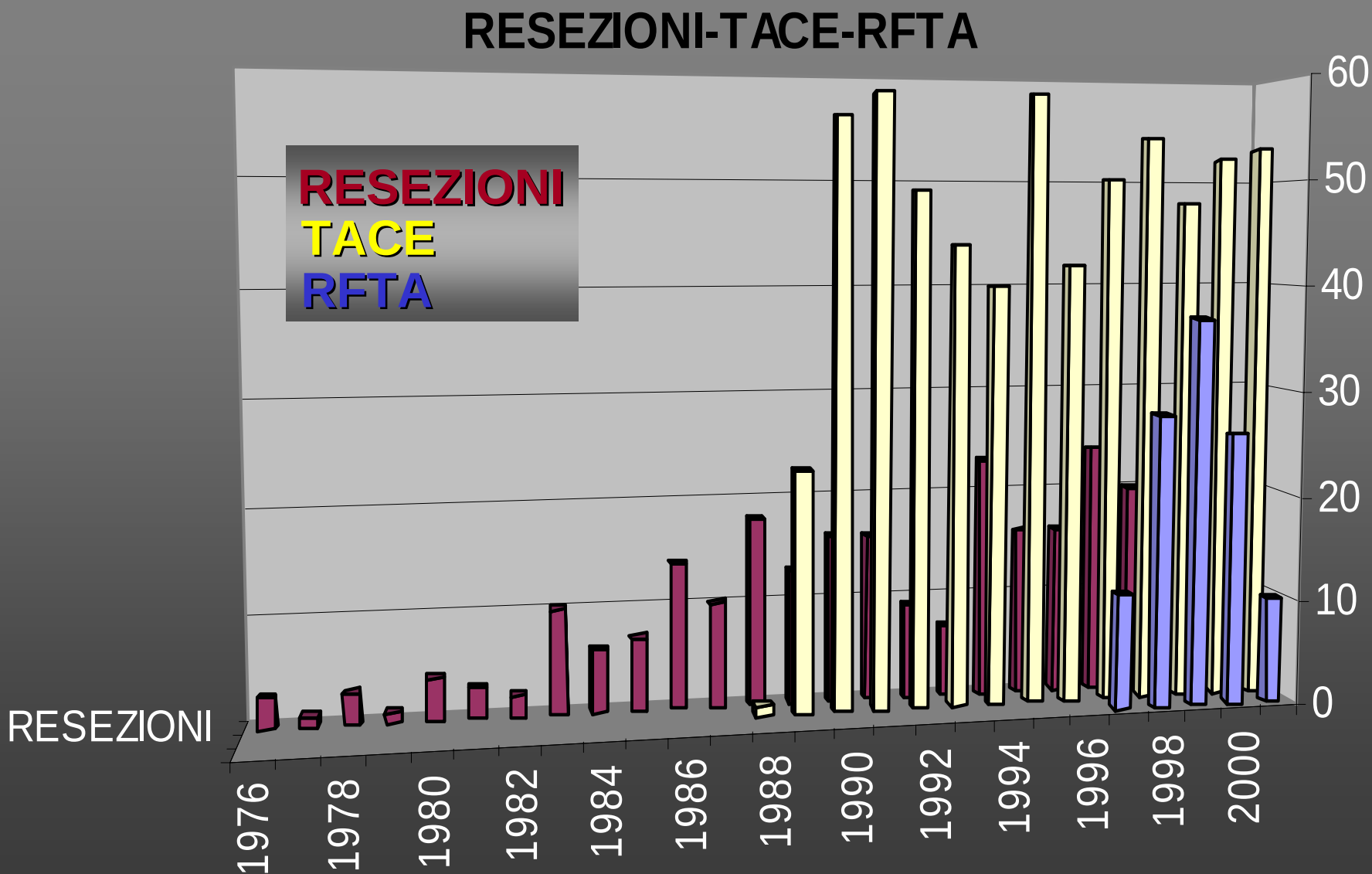
NON CIRROTICI 76-90



NON CIRROTICI 90-2000

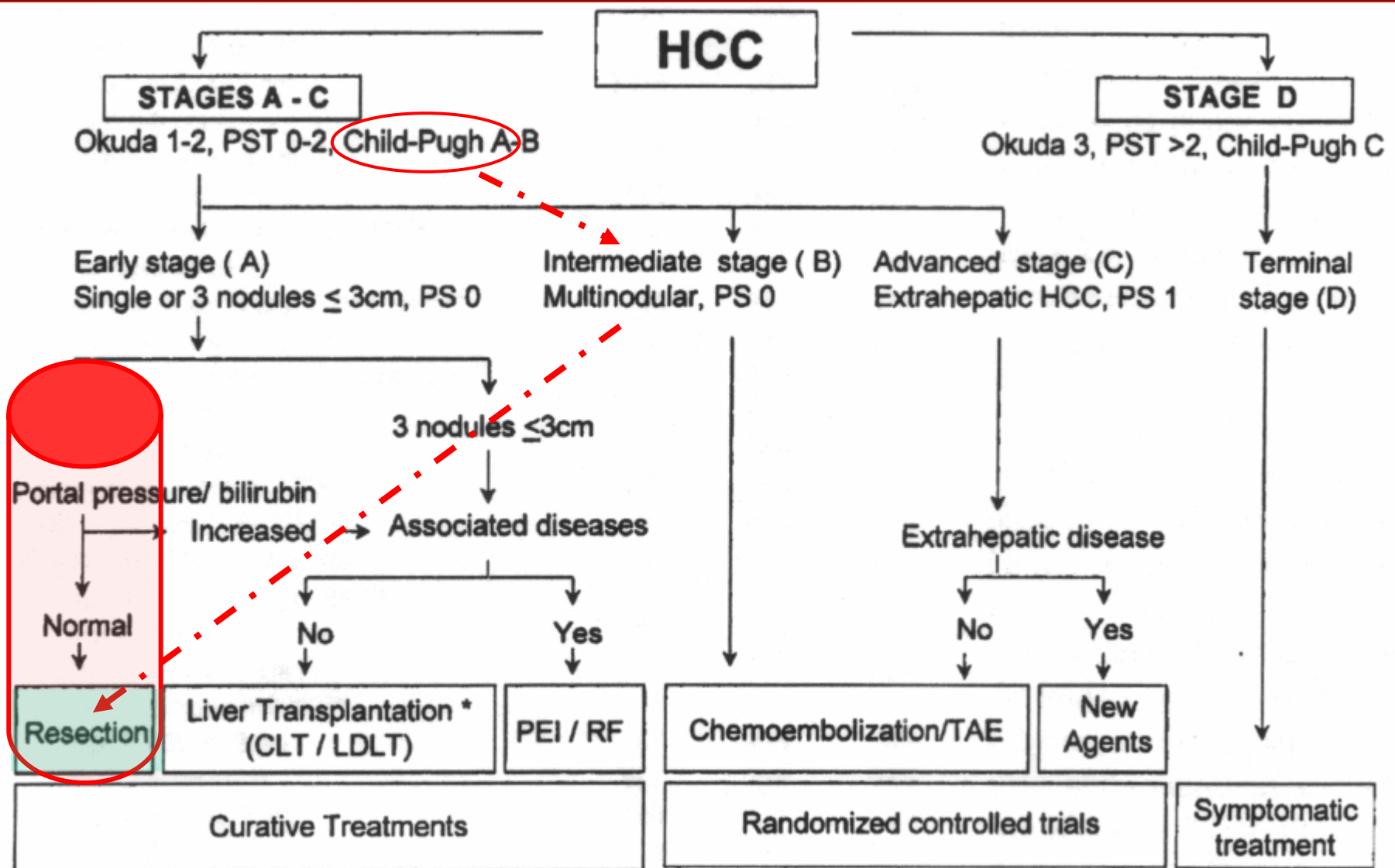


PROCEDURE TERAPEUTICHE PER HCC



Barcelona-Clinic Liver Cancer (BCLC) staging classification and treatment schedule.

'99 modified '02



RESEZIONE EPATICA PER HCC

RUOLO DELLA CHIRURGIA RESETTIVA

