XII SIMPÓSIO

DE CIRURGIA VÍDEO ENDOSCÓPICA DO NOROESTE FLUMINENSE

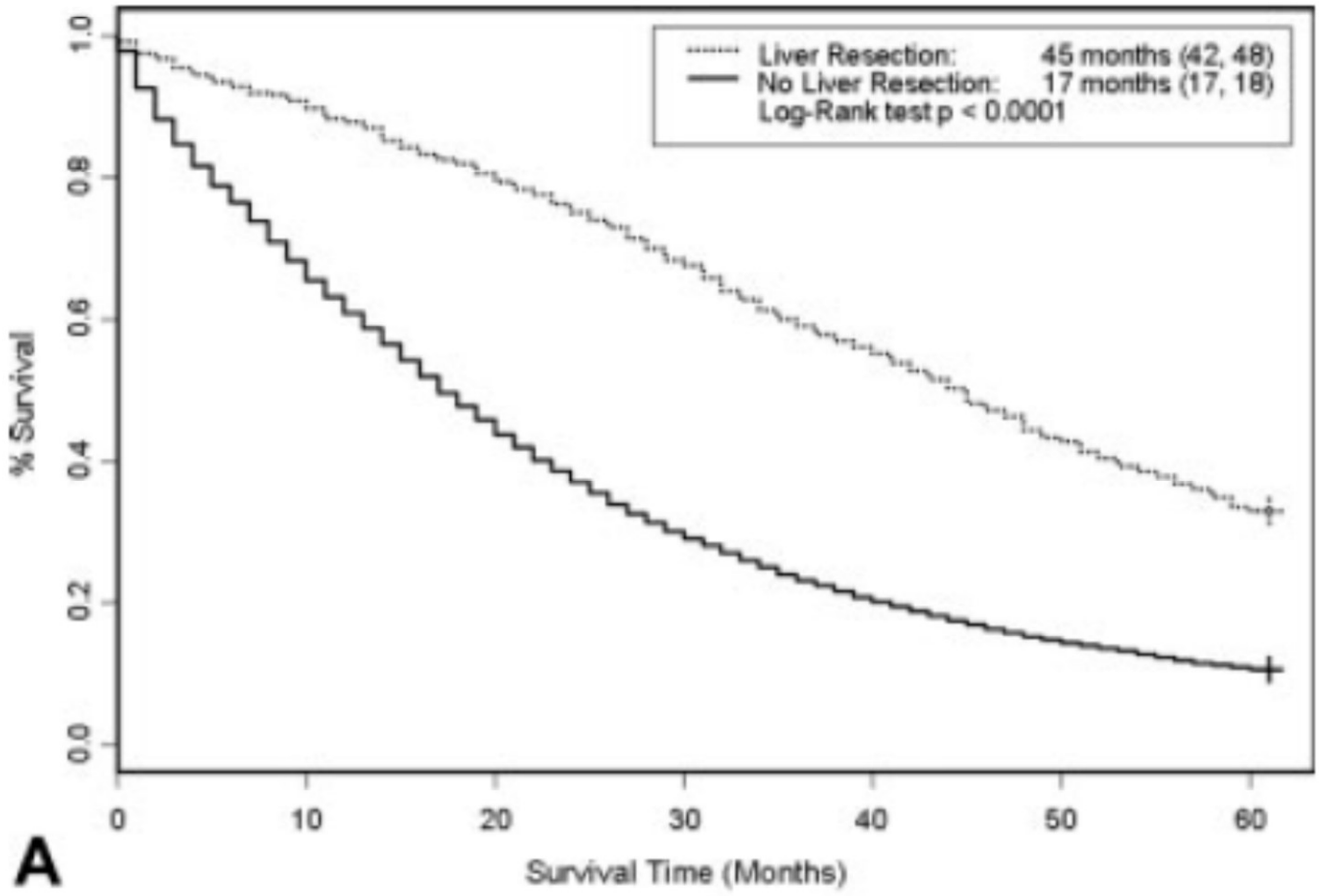
24 e 25 de Agosto de 2017

Auditório Hayrton Moreira Bastos -Hospital São José do Avaí-Itaperuna - RJ

Limites da hepatectomia por metástase: ALPPS

Orlando Jorge M. Torres
Professor Titular
Chefe do Serviço de Cirurgia do Aparelho Digestivo - UFMA

Ressecção hepática

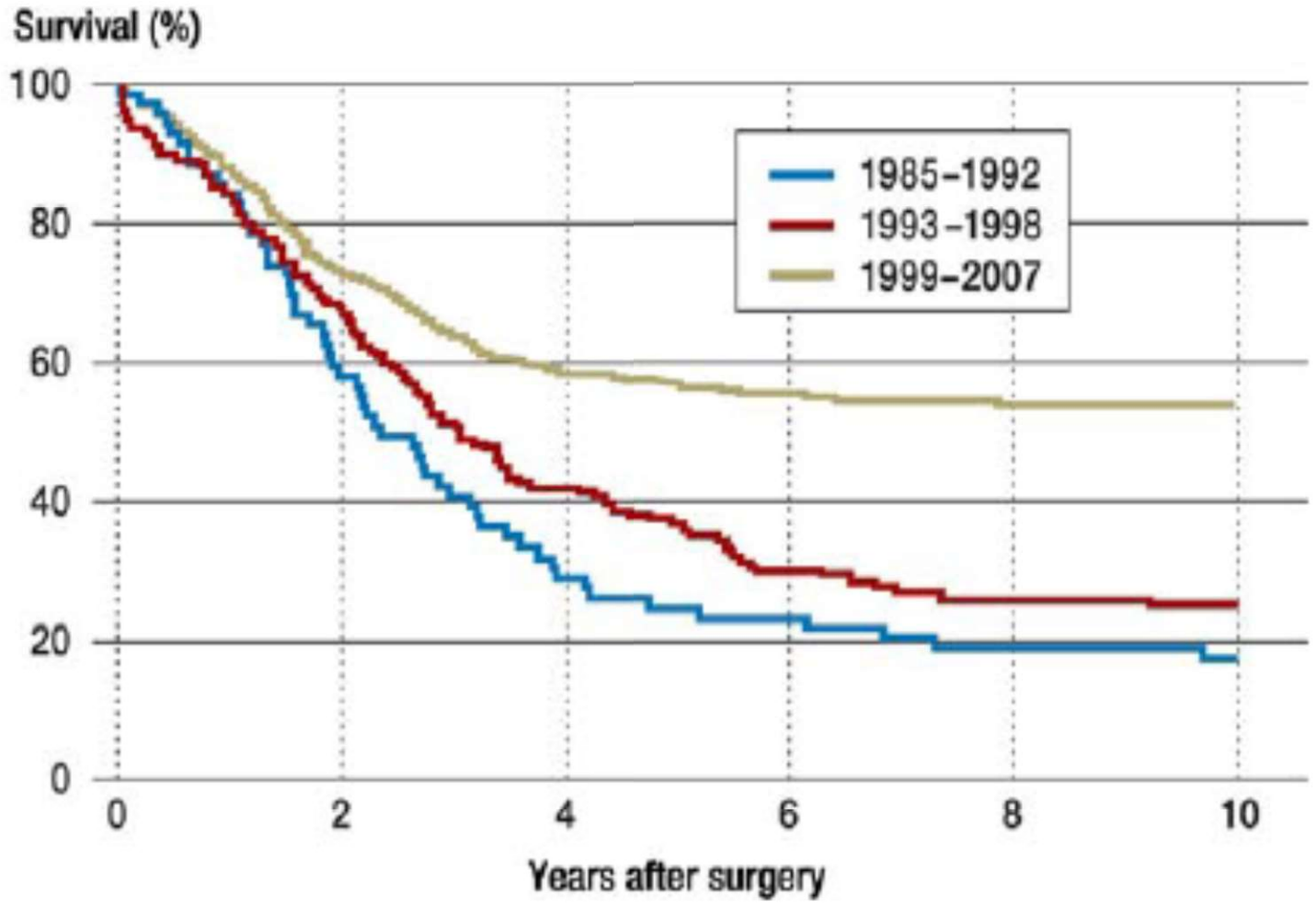


- A ressecção hepática esteve associada com aumento na sobrevida.

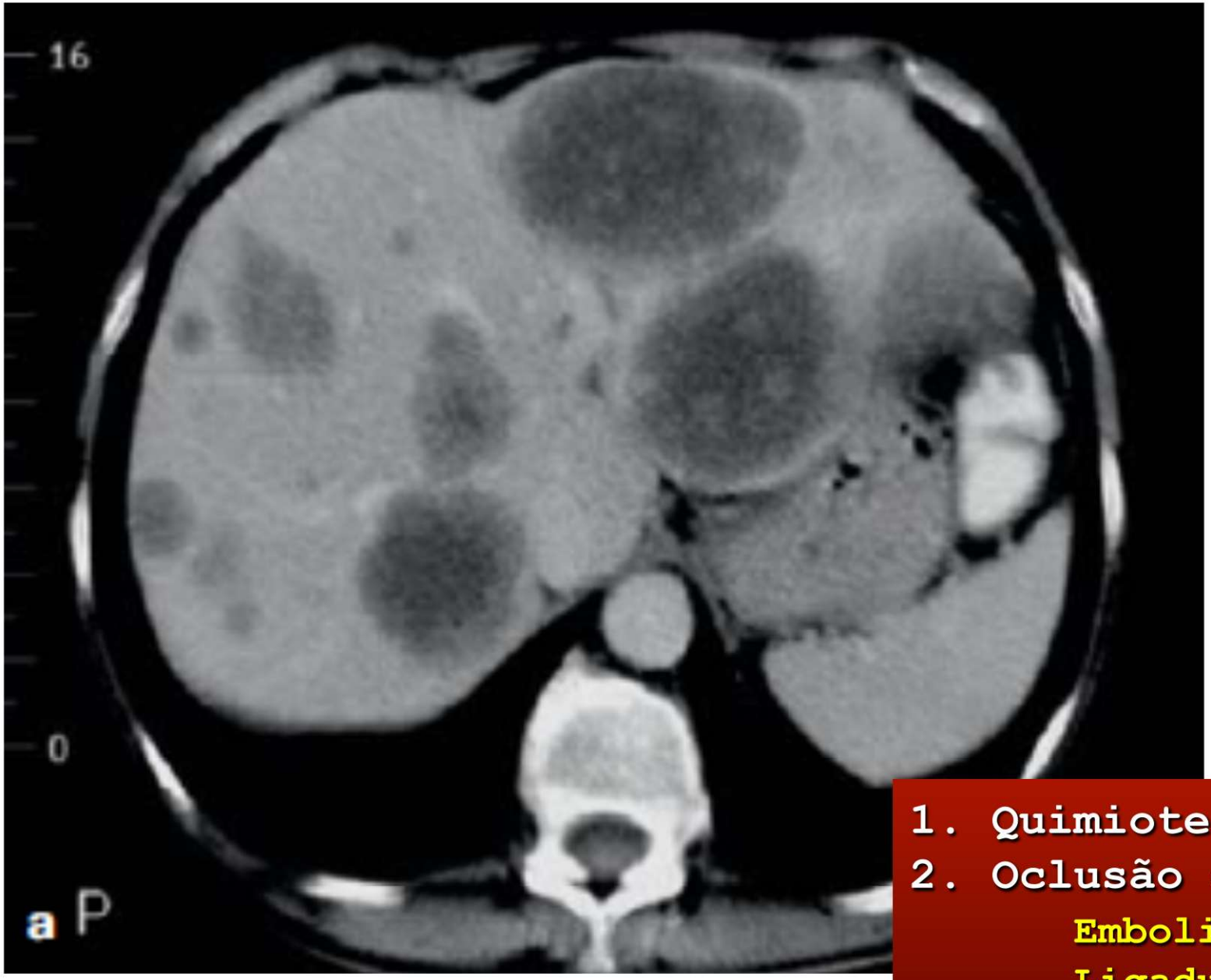
Cummings LC, et al. Cancer 109:718-726, 2007

Resultados em meta colo-retal

FIGURE 2

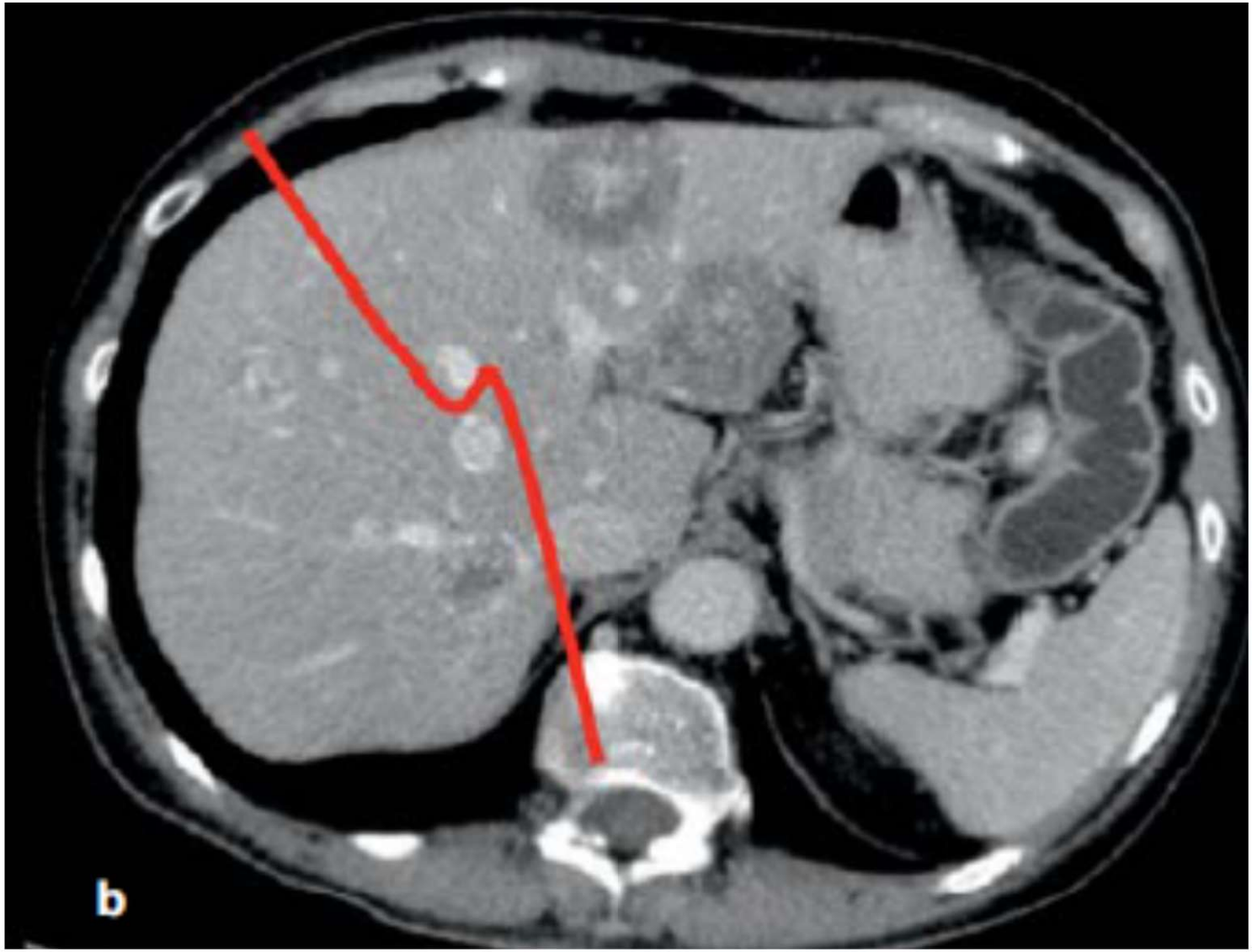


Neumann UP et al – Dtsch Arztebl Int 2010;107:335-42

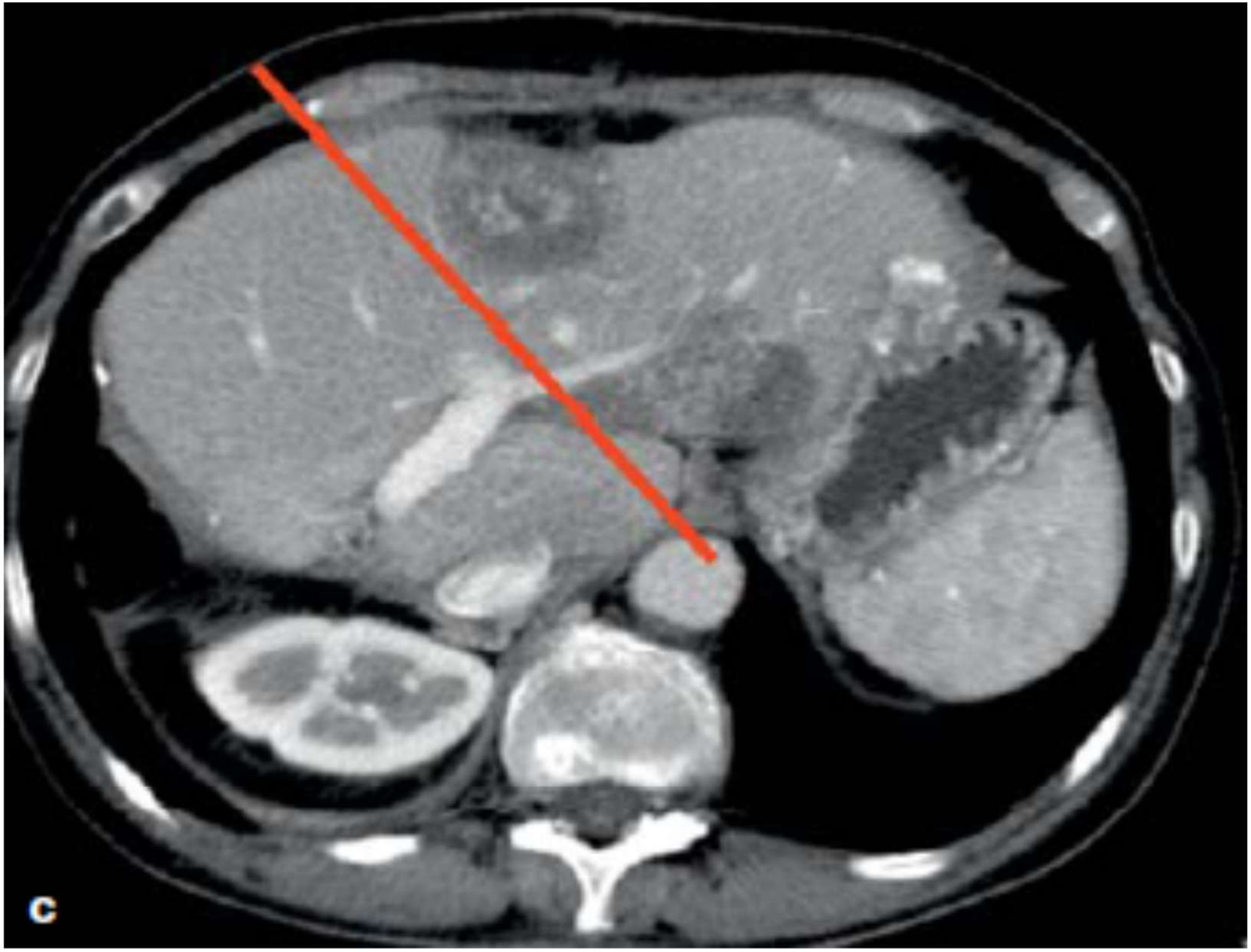


1. Quimioterapia
2. Oclusão da veia porta
   - Embolização
   - Ligadura
3. Operações repetidas

Neumann UP et al – Dtsch Arztebl Int 2010;107:335-42

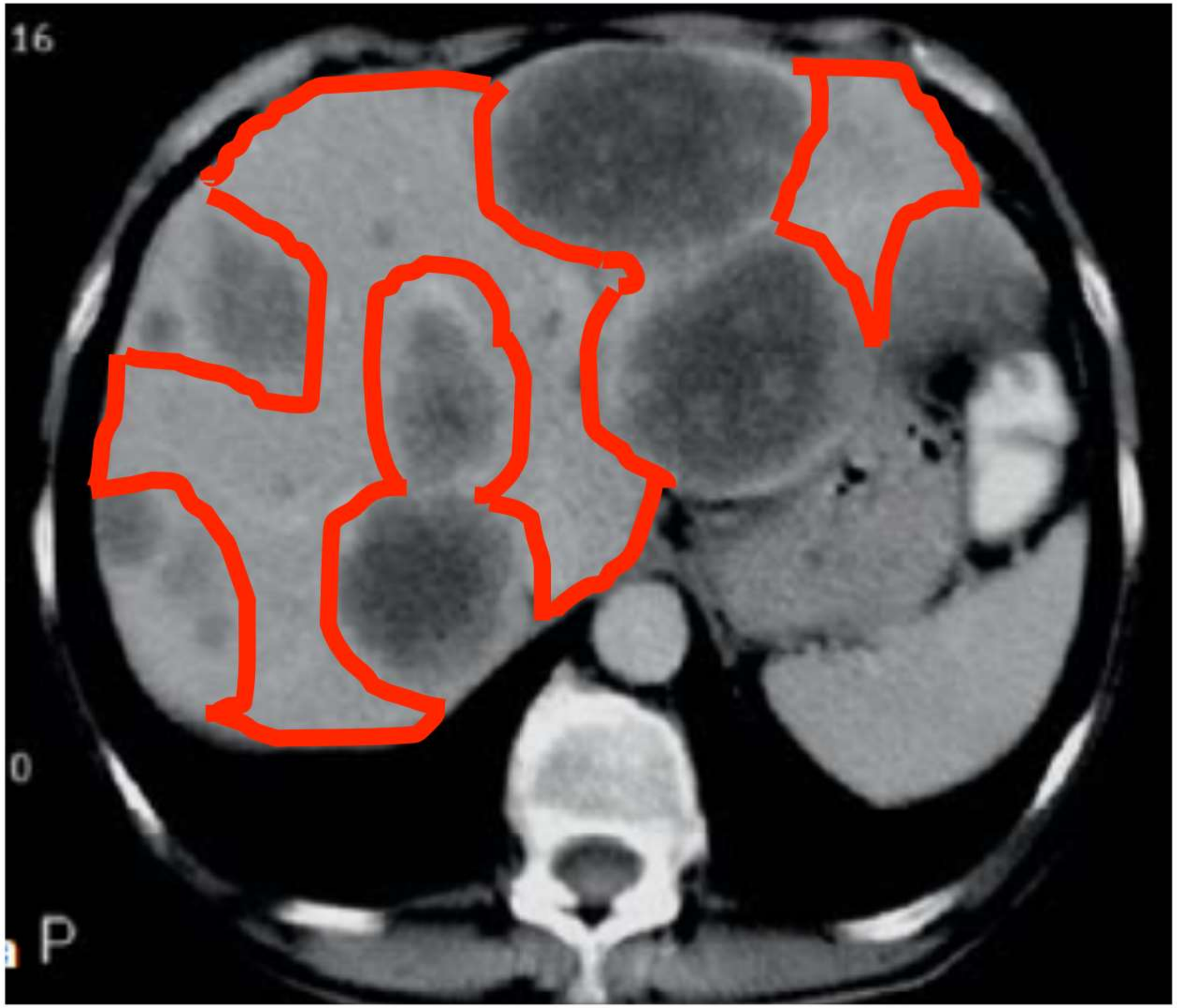


Neumann UP et al – Dtsch Arztebl Int 2010;107:335-42



Neumann UP et al – Dtsch Arztebl Int 2010;107:335-42

Neumann UP et al – Dtsch Arztebl Int 2010;107:335-42



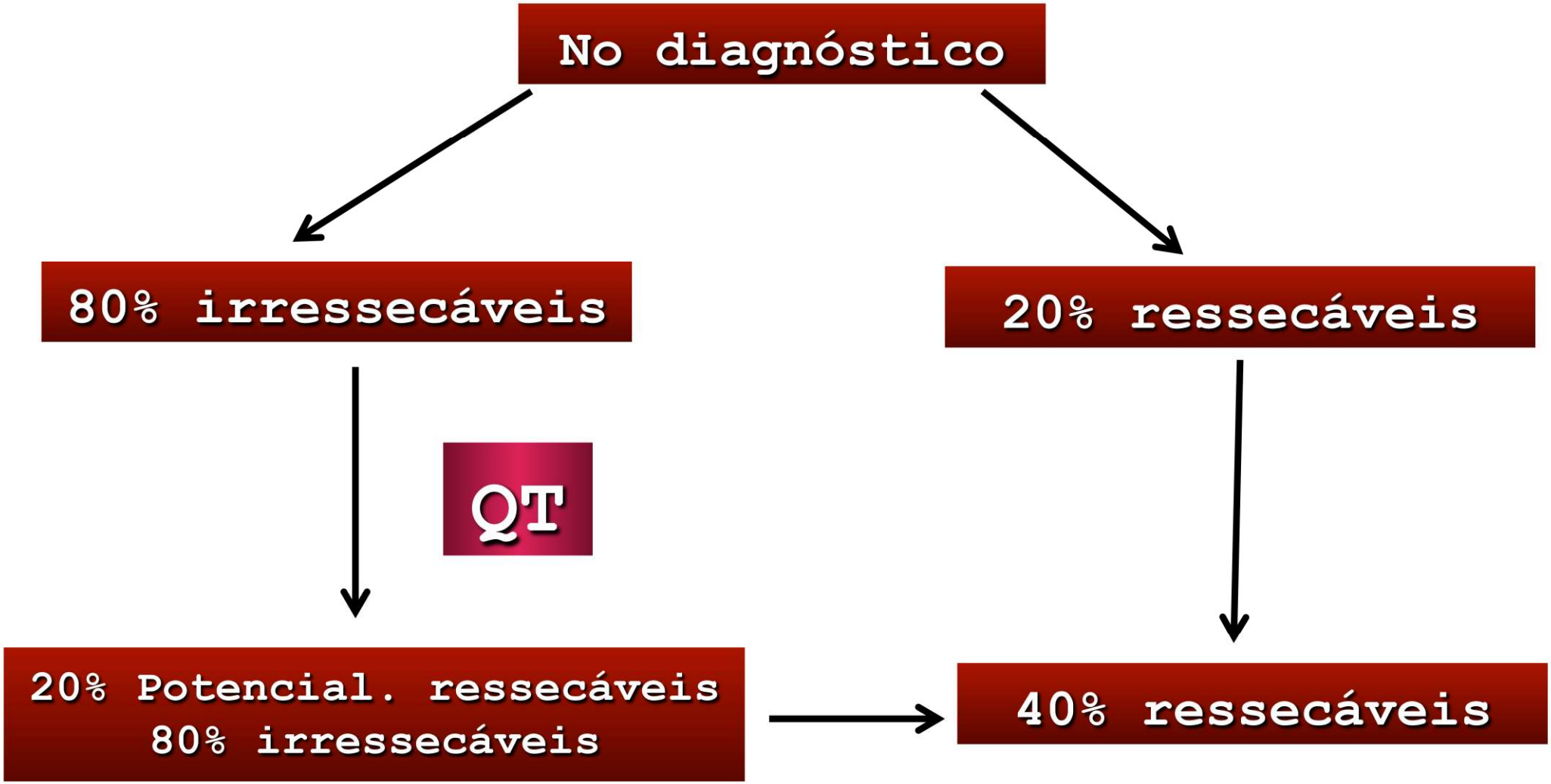
“Ver a vida pelo lado bom”

mor no

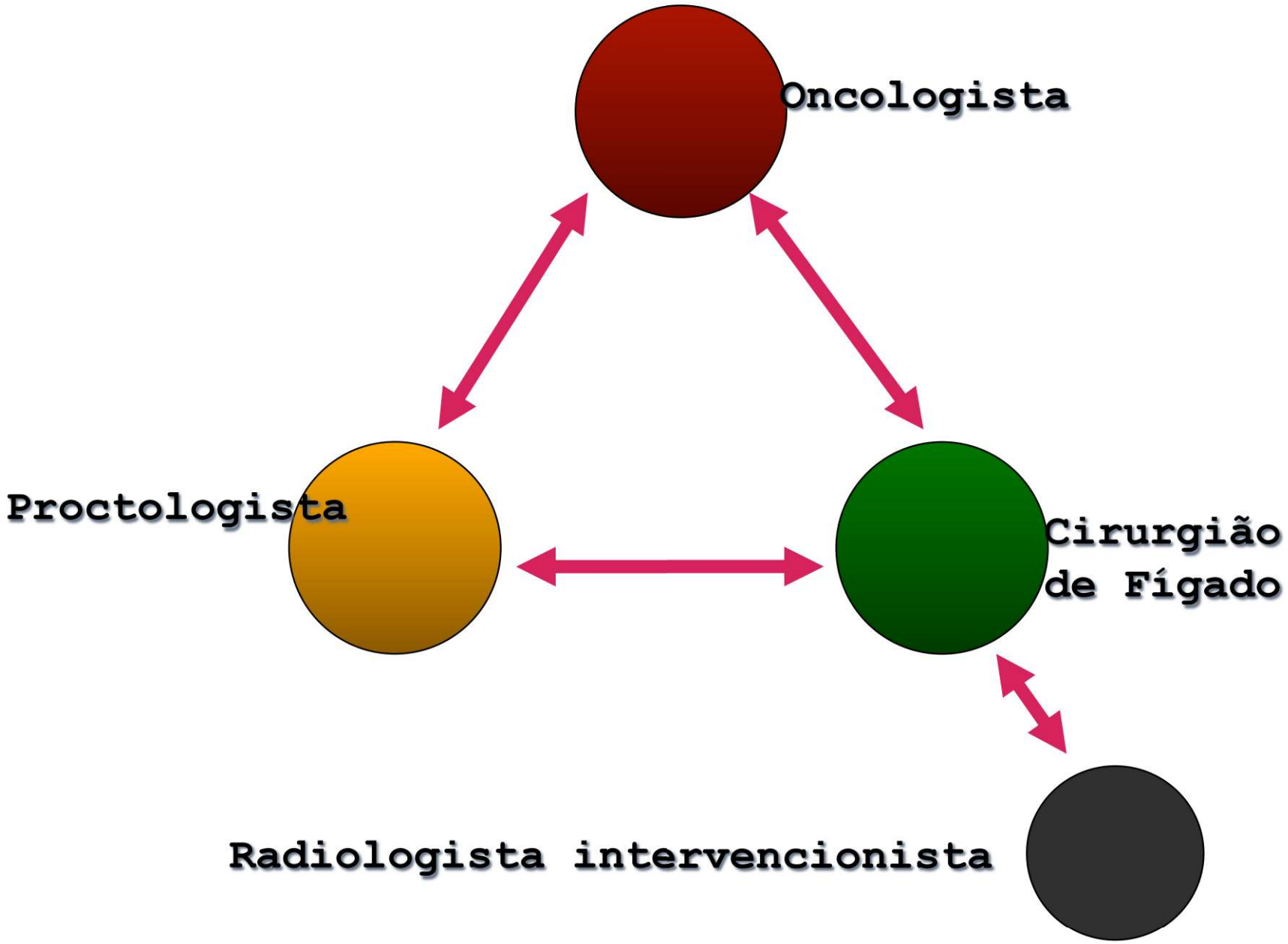
fígad ... amor”

Abdalla EK, et al. Dig Surg 2008;25:421-9

Metástase hepática de origem colo-retal

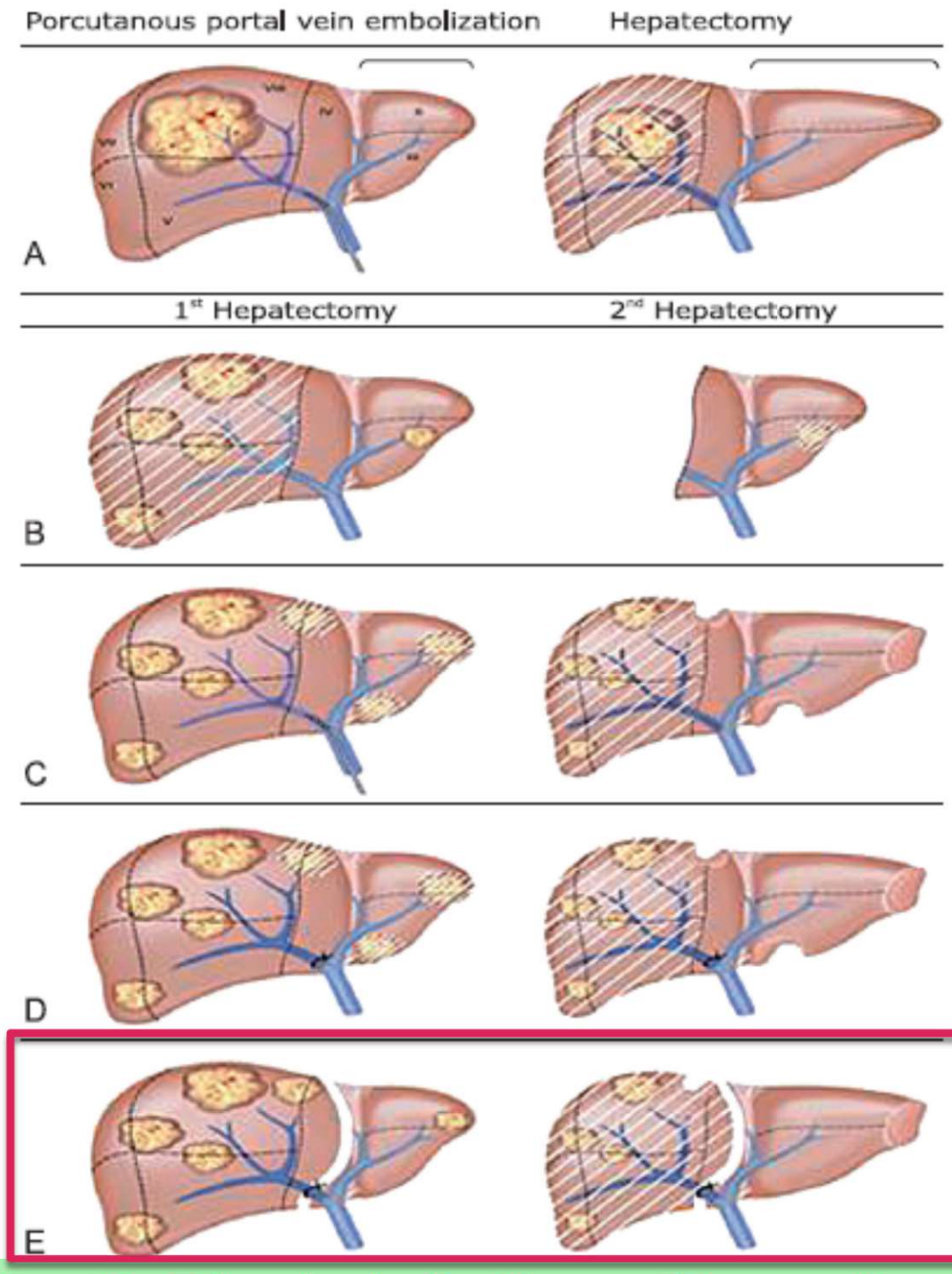


European Study Group of Liver Metastasis, 2010

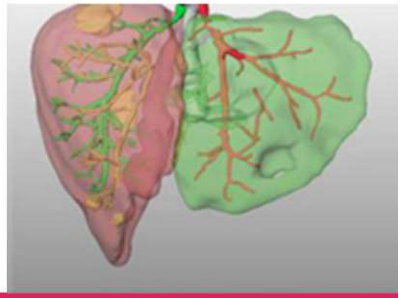

Oncologista
Proctologista
Cirurgião
de Fígado
Radiologista intervencionista

OPÇÕES DE TRATAMENTO EM META COLO-RETAL SINCRÔNICA

1. COLECTOMIA....QT....HEPATECTOMIA...QT
2. (COLECTOMIA + HEPATECTOMIA)...QT
3. COLECTOMIA..QT..EMBOLIZACAO PORTA..HEPATECTOMIA..QT
4. COLECTOMIA...QT....HEPATECTOMIA....HEPATECTOMIA....QT
5. COLEC....QT....HEPATEC...EMBOL PORTA...HEPATEC....QT
6. QT....(COLECTOMIA + HEPATECTOMIA)....QT
7. QT....COLECTOMIA....QT....HEPATECTOMIA....QT
8. QT...COLECTOMIA...EMBOL PORTA....HEPATECTOMIA
9. QT (+ RAD)...HEPATECTOMIA....QT...COLECTOMIA
10. QT...EMBOL PORTA...HEPATECTOMIA...COLECTOMIA
11. QT...HEPATECTOMIA....HEPATECTOMIA....COLECTOMIA
12. (COLECT + HEPAT 1° EST) + EVP...QT...HEPATEC (2° EST)



Courtesy Dr. Eduardo de Santibanes (Buenos Aires – Argentina



EDITORIAL

Playing Play-Doh to Prevent Postoperative Liver Failure

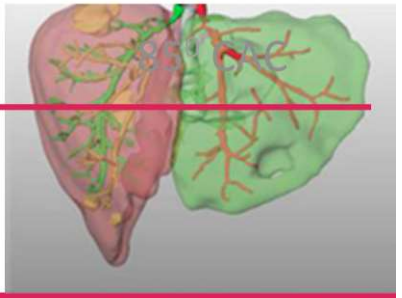
The "ALPPS" approach

Eduardo de Santibañes, MD, PhD, and Pierre-Alain Clavien, MD, PhD†*

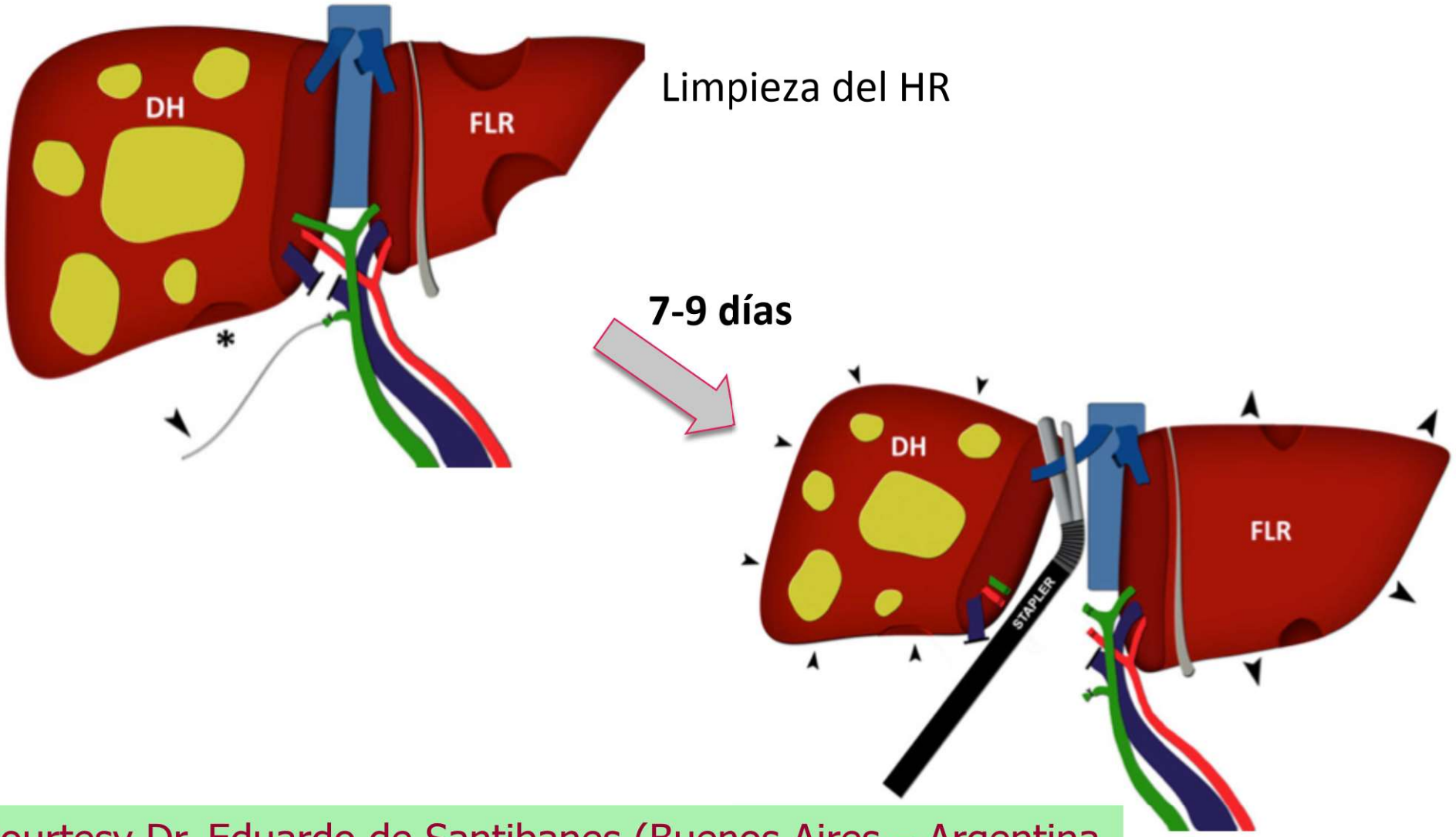
The safe removal of extensive tumor load in the liver has been one of the main focuses of laboratory and clinical research for hepato-biliary surgeons over the past 3 decades.[1] The first breakthrough is credited to Masatoshi Makuuchi, who in 1980s, introduced the concept of the portal vein embolization (PVE) of the right portal branch to induce hypertrophy of the left side of the liver, enabling a safer removal of large or multiple tumors, mostly located in the right hemiliver and segment IV[2] This technique was rapidly adopted by many to prevent liver failure after a variety of extensive

ALPPS

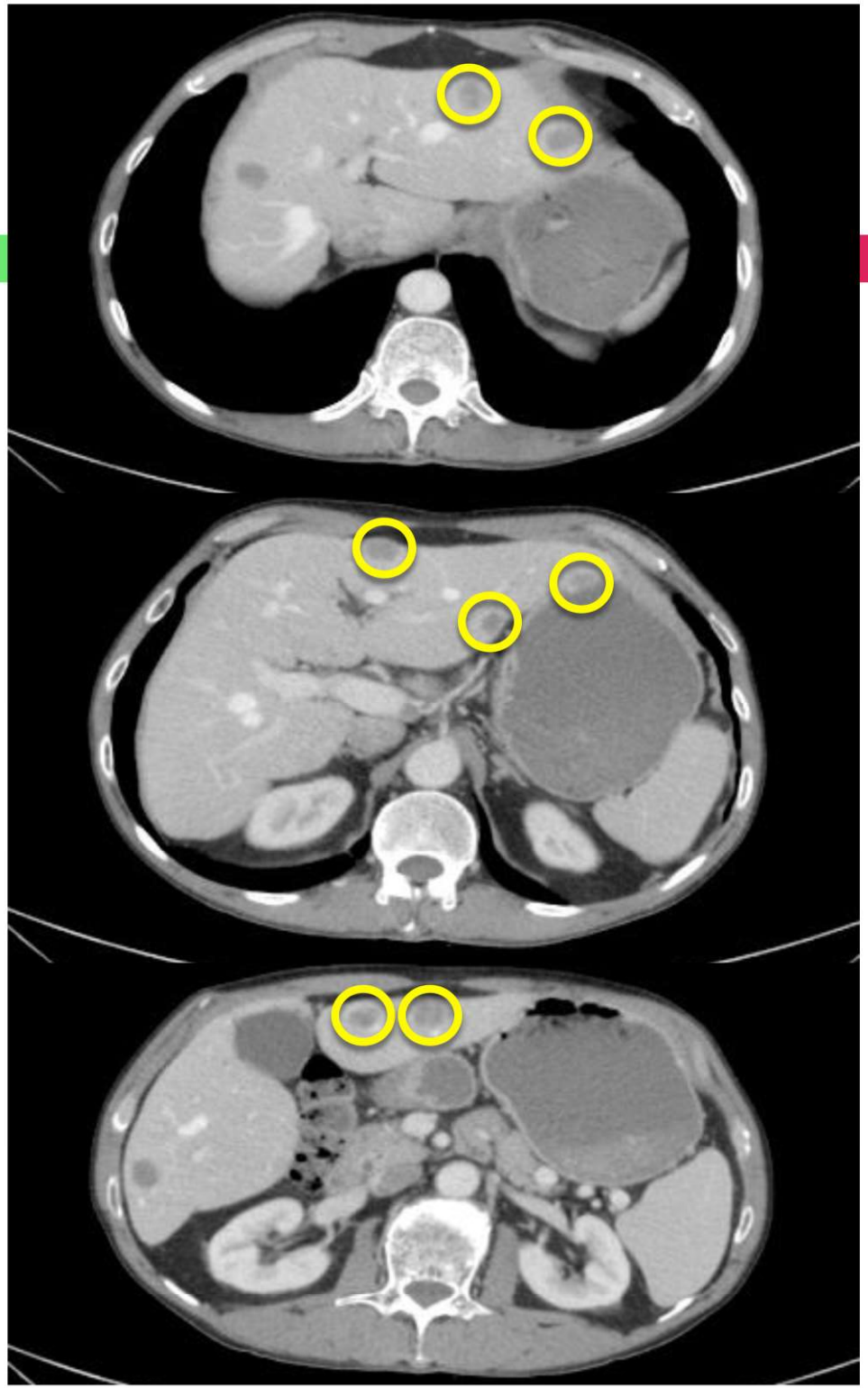
Santibanes E, Clavien P. Ann Surg 2012;255:415-7



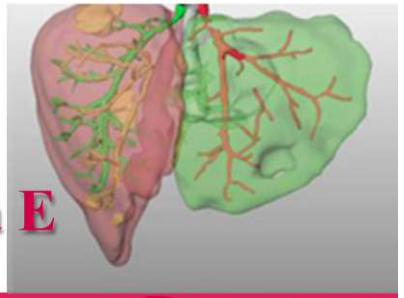
Aspectos técnicos



Courtesy Dr. Eduardo de Santibanes (Buenos Aires – Argentina



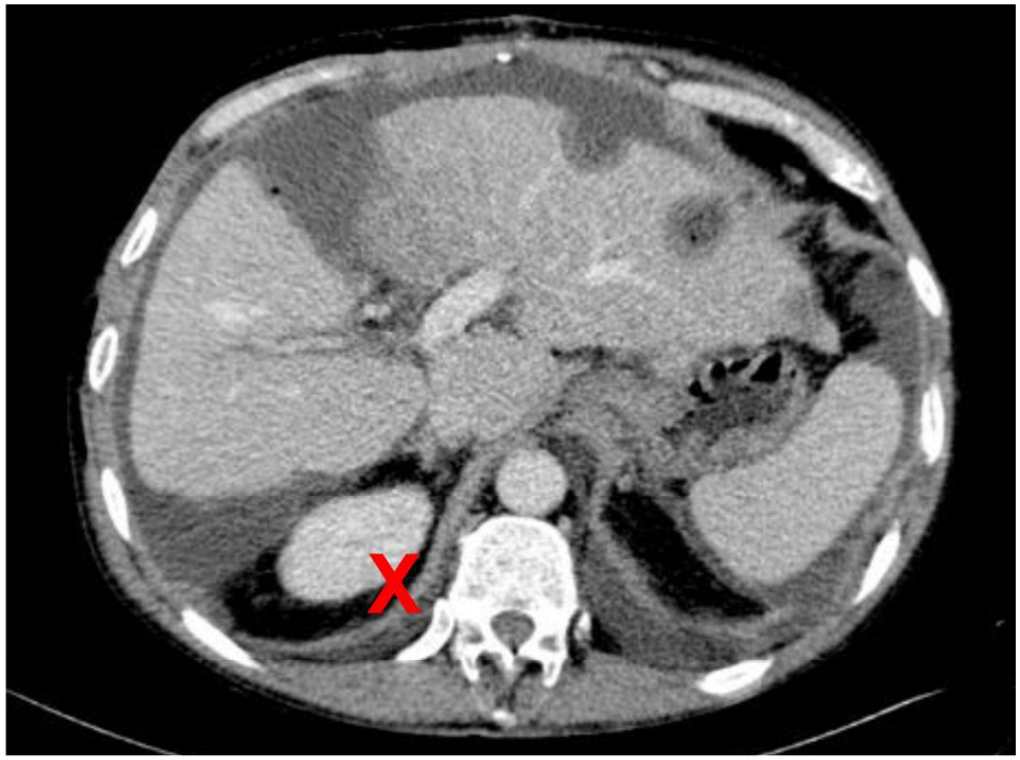
- 1º Tempo



Ressecção lesões à E

Ligadura da veia porta D

Transecção do parênquima



Serviço de Cirurgia do Fígado HC/FMUSP

*Cortesia Prof. Paulo Herman

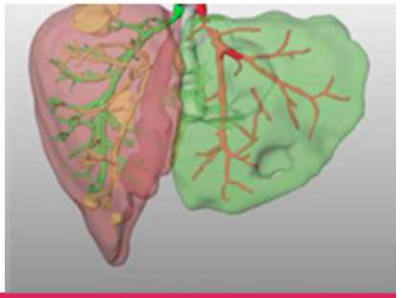
Table 1. Surgical outcomes of ALPPS

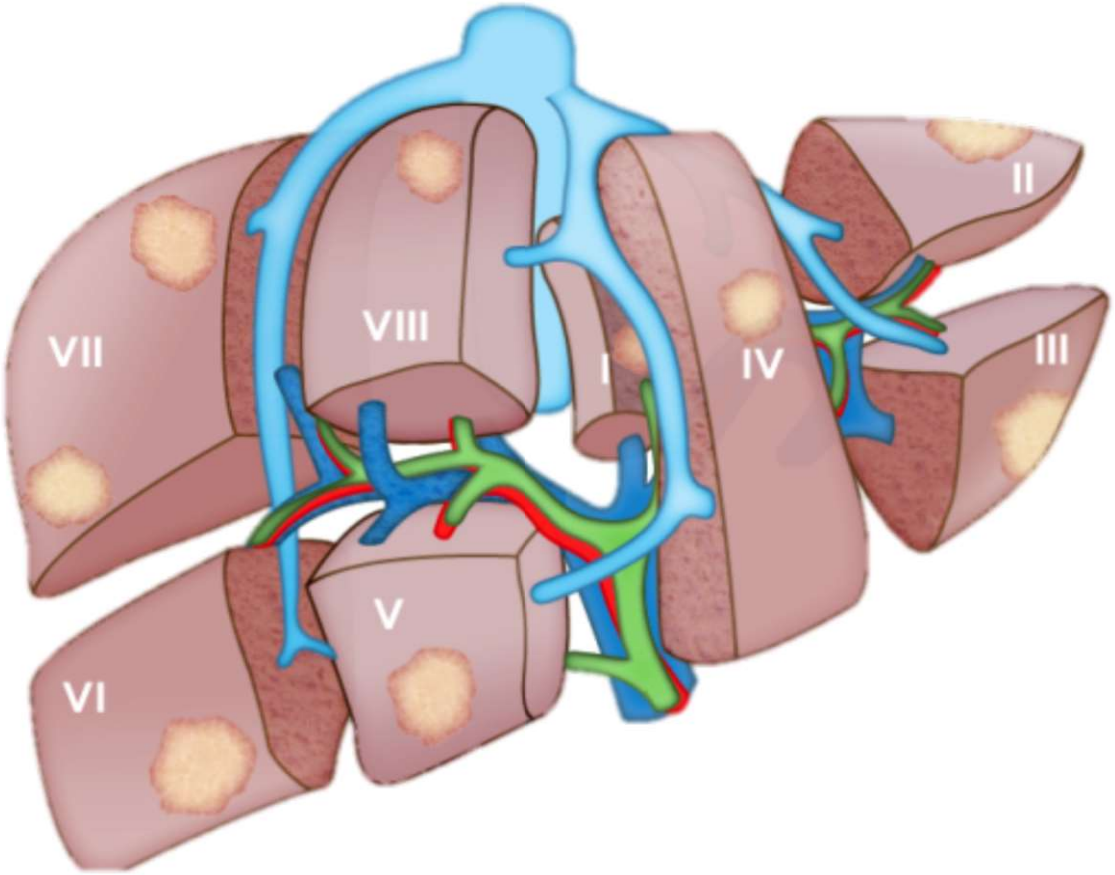
Studies	*n*	Overall morbidity (%)	Overall mortality (%)	Success complete resection (%)	Interval (d, mean/median)	FLR regeneration rate (%, mean/median)	R0 resection (%)
Schnitzbauer et al (2012)[3]	25	68	12	100	9	74	96
Sala et al (2012)[9]	10	40	0	100	7	82	100
Torres et al (2013)[10]	39	59	13	95	14	83	100
Li et al (2013)[11]	9	66	22	100	13	87	100
Ielpo et al (2013)[12]	6	50	17	100	15	110	/
Troja et al (2014)[13]	5	100	20	100	16.4	/	100
Oldhafer et al (2014)[14]	7	86	0	100	13	65	100
Nadalin et al (2014)[15]	15	67	29	100	13	87	87
Robles et al (2014)[16]	22	63	9	100	7	61	100
Schadde et al (2014)[17]	202	>grade 3a: 40 >grade 3b: 28	9	98	10	86	91
Kremer et al (2015)[18]	19	68	16	100	8	74	100
Hernandez-Alejandro et al (2015)[19]	14	36	0	100	8	93	86
Truant et al (2015)[20]	62	80.6	12.9	95	8	48	/
Alvarez et al (2015)[21]	30	53	6.6	97	6	89.7	93.1
Lang et al (2015)[22]	16	64	12.5	100	9	86	100
Vivarelli (2015)[23]	9	66.7	11.1	96	10.8	96	/
Chan et al (2016)[24]	13	15.3	7.7	100	8	53	100
Røsok et al (2016)[25]	36	92	0	100	6	67	71
Serenari et al (2016)[26]	50	54	20	96	/	/	/
Björnsson et al (2016)[27]	10	100	0	100	8	64.2	90

FLR: future liver remnant; ALPPS: associating liver partition and portal vein ligation for staged hepatectomy.

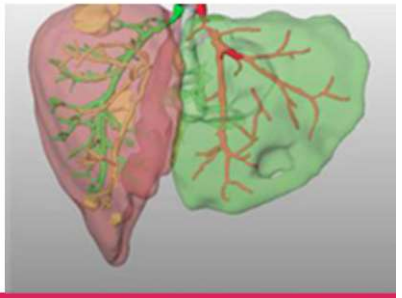
Lau WY, et al. Hepatobiliary Pancreat Dis Int 2017

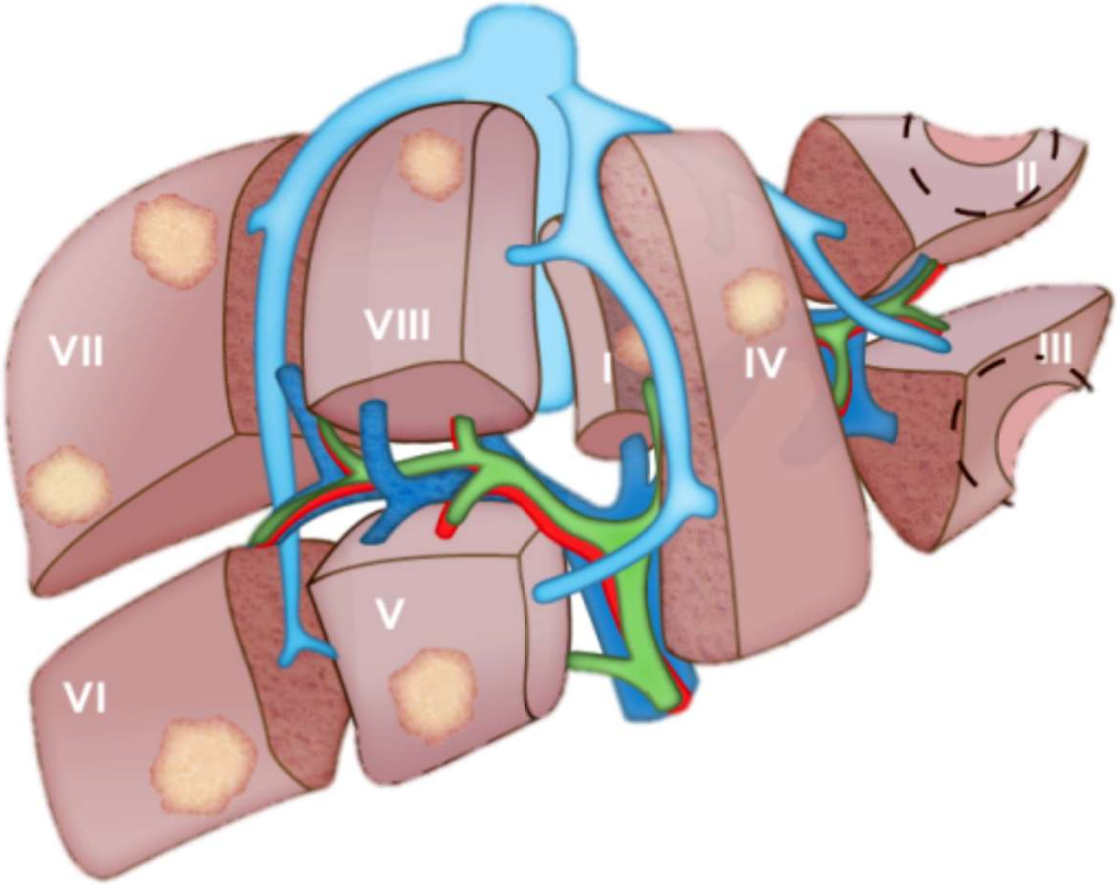
ALPPS





ALPPS





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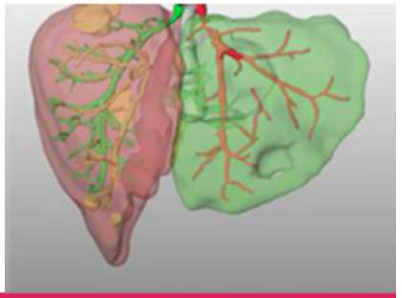

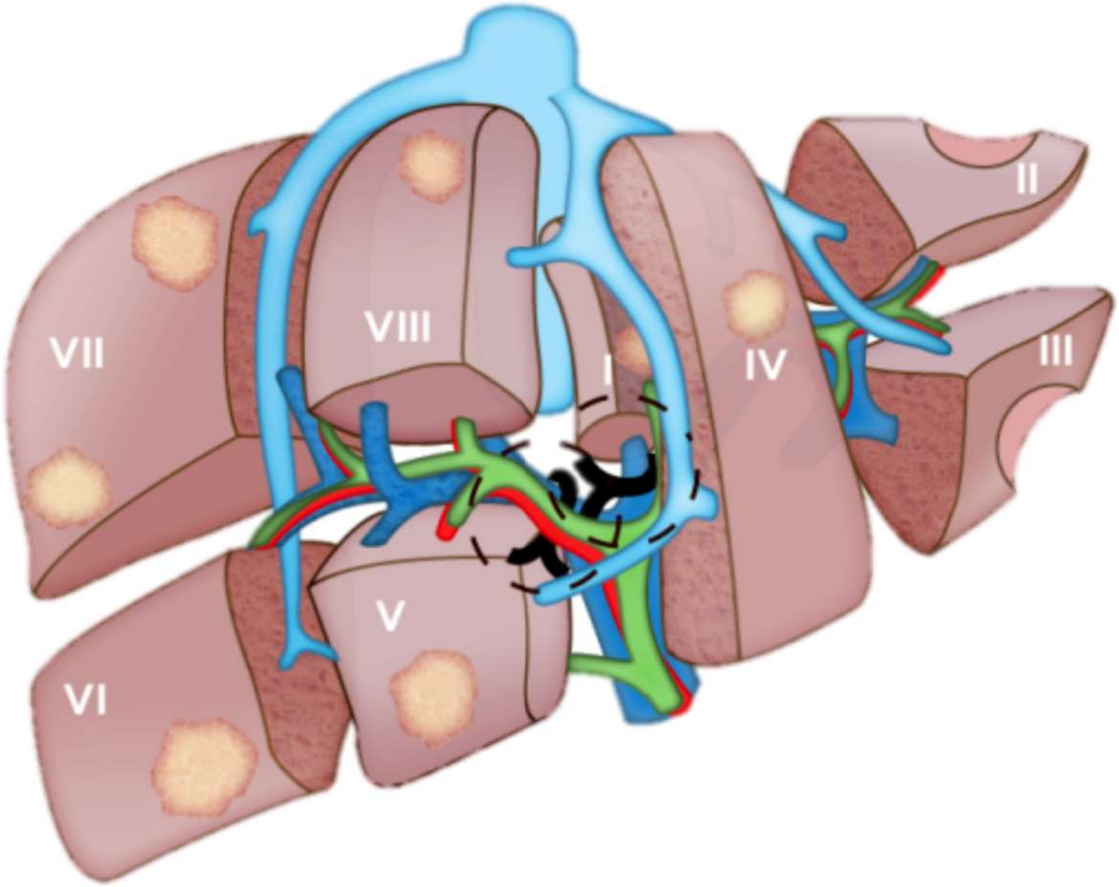

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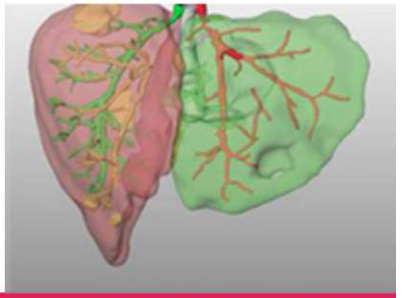

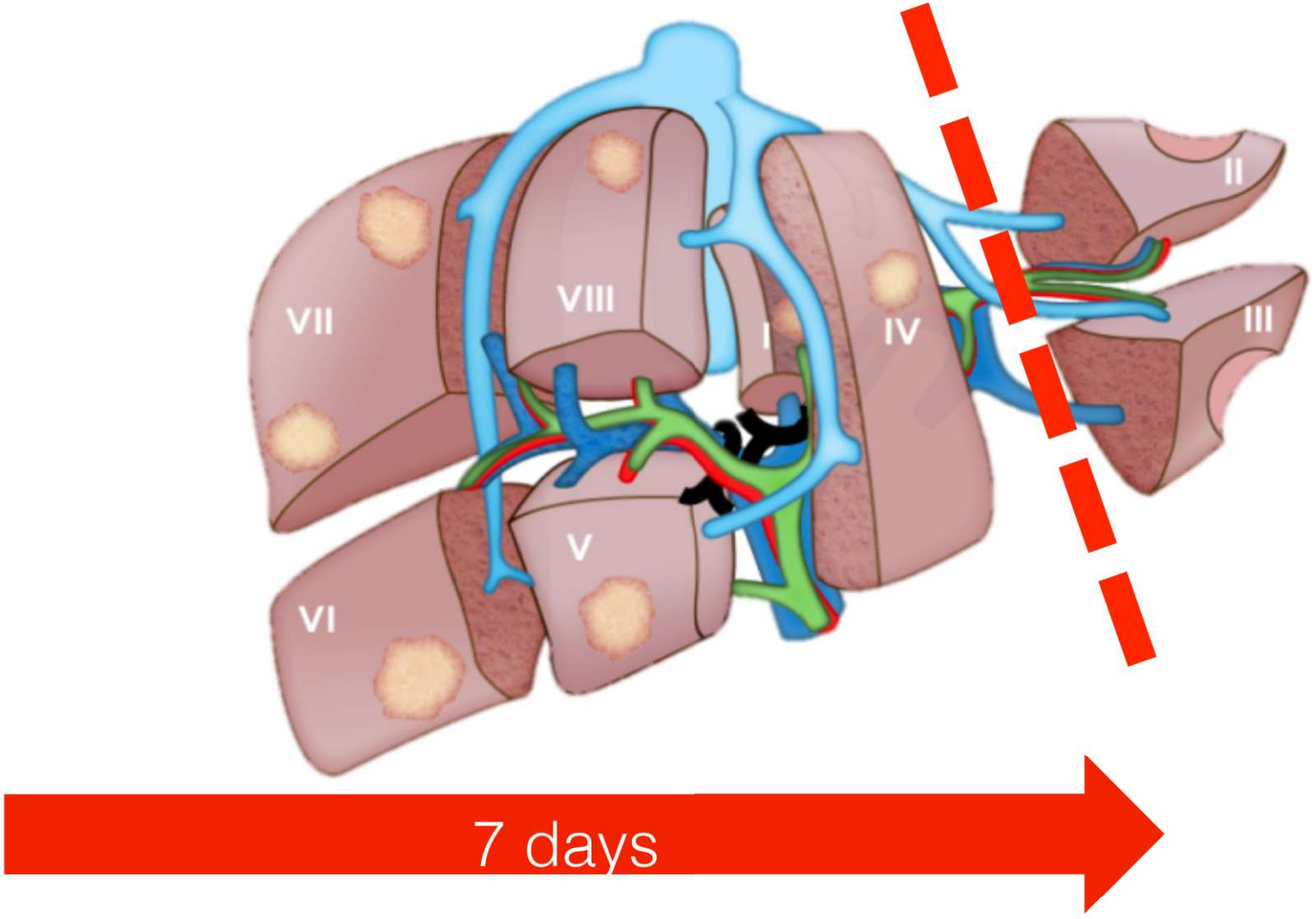

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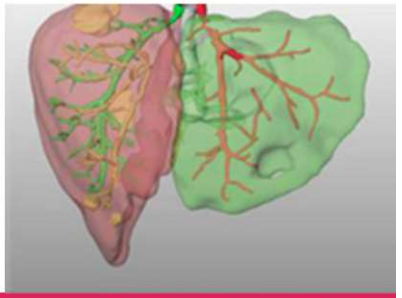

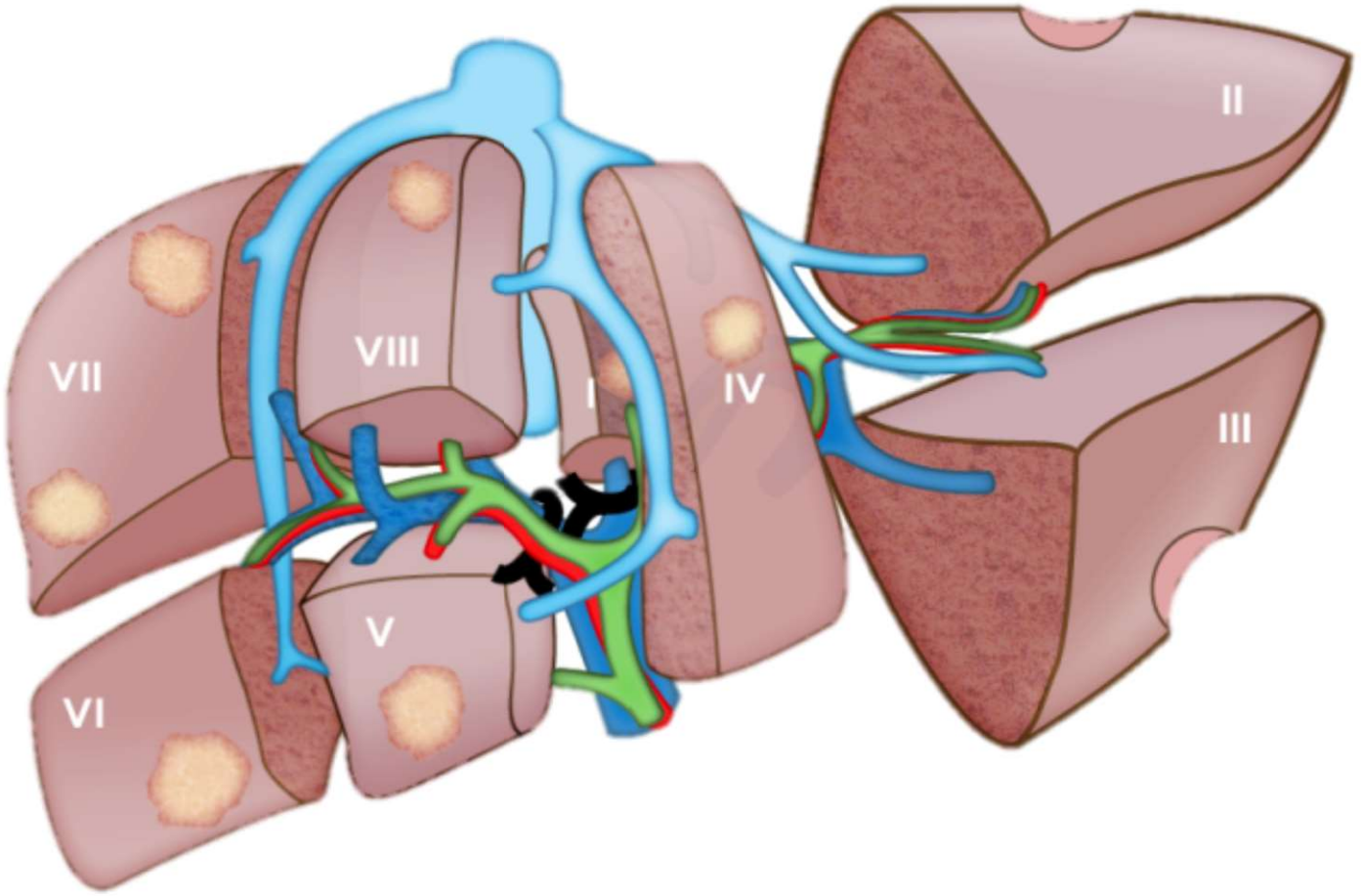

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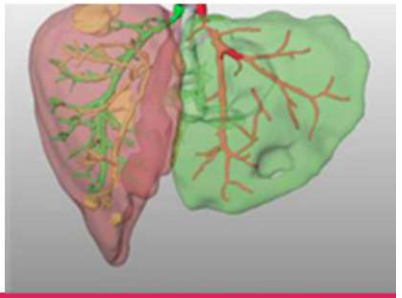
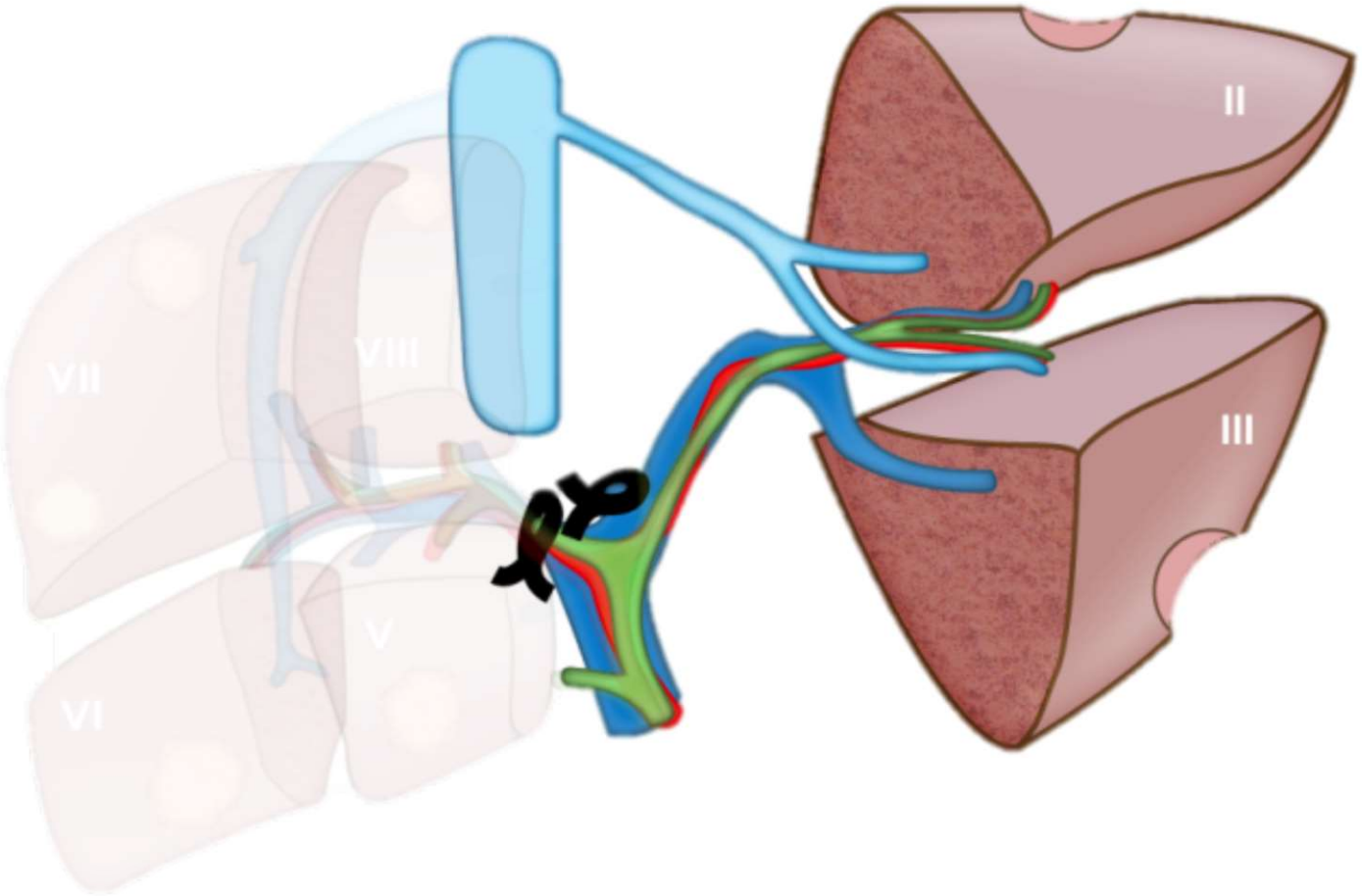




ABCDDV/886

ABCD Arq Bras Cir Dig
2012;25(4):290-292

Technique

ASSOCIATING LIVER PARTITION AND PORTAL VEIN LIGATION FOR STAGED HEPATECTOMY (ALPPS): A NEW APPROACH IN LIVER RESECTIONS

Ligadura da veia porta associada à transecção para hepatectomia em dois estágios (ALPPS): uma nova abordagem nas ressecções hepáticas

Orlando Jorge Martins **TORRES**, José Maria Assunção **MORAES-JUNIOR**, Nádia Caroline Lima e **LIMA**, Anmara Moura **MORAES**

From the Department of Digestive Surgery, UDI Hospital, São Luis, MA, Brazil.

ABSTRACT – ***Background*** - Postoperative liver failure consequent to insufficiency of remnant liver is a feared complication in patients who underwent extensive liver

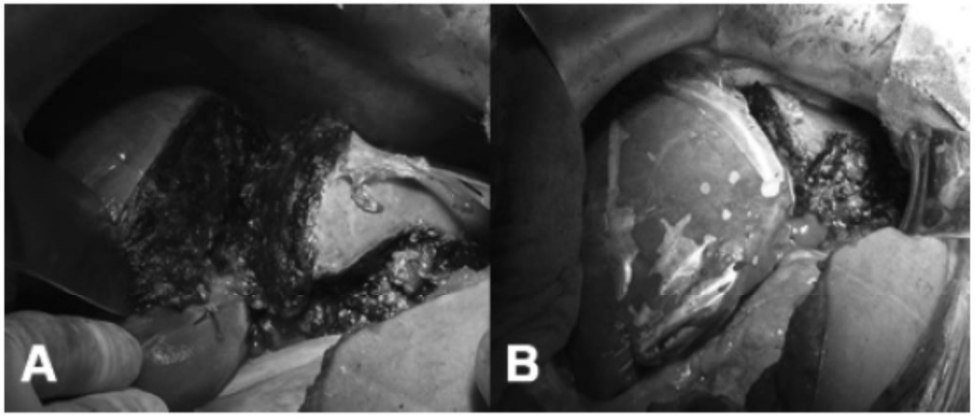


FIGURE 1 - A - Transection of the liver; B - protection with sterile bag

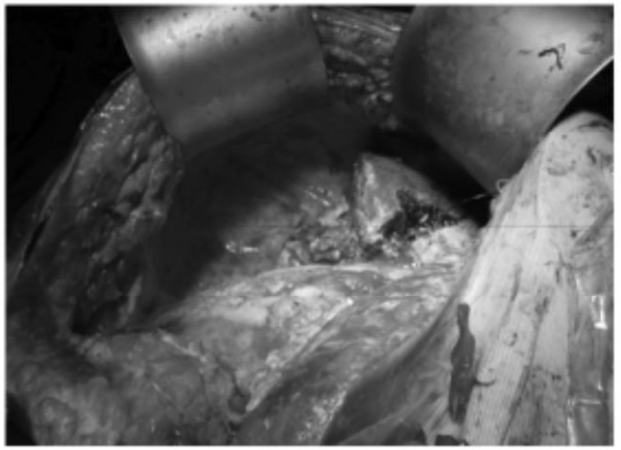
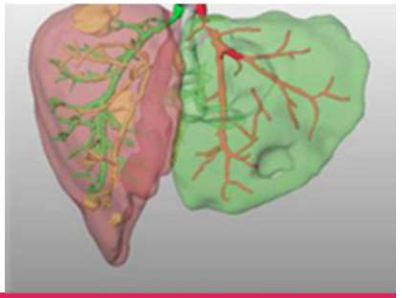


FIGURE 2 - Final aspect of the surgical procedure

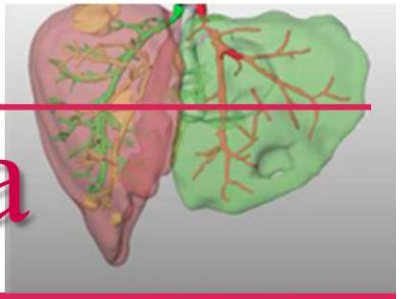
ALPPS

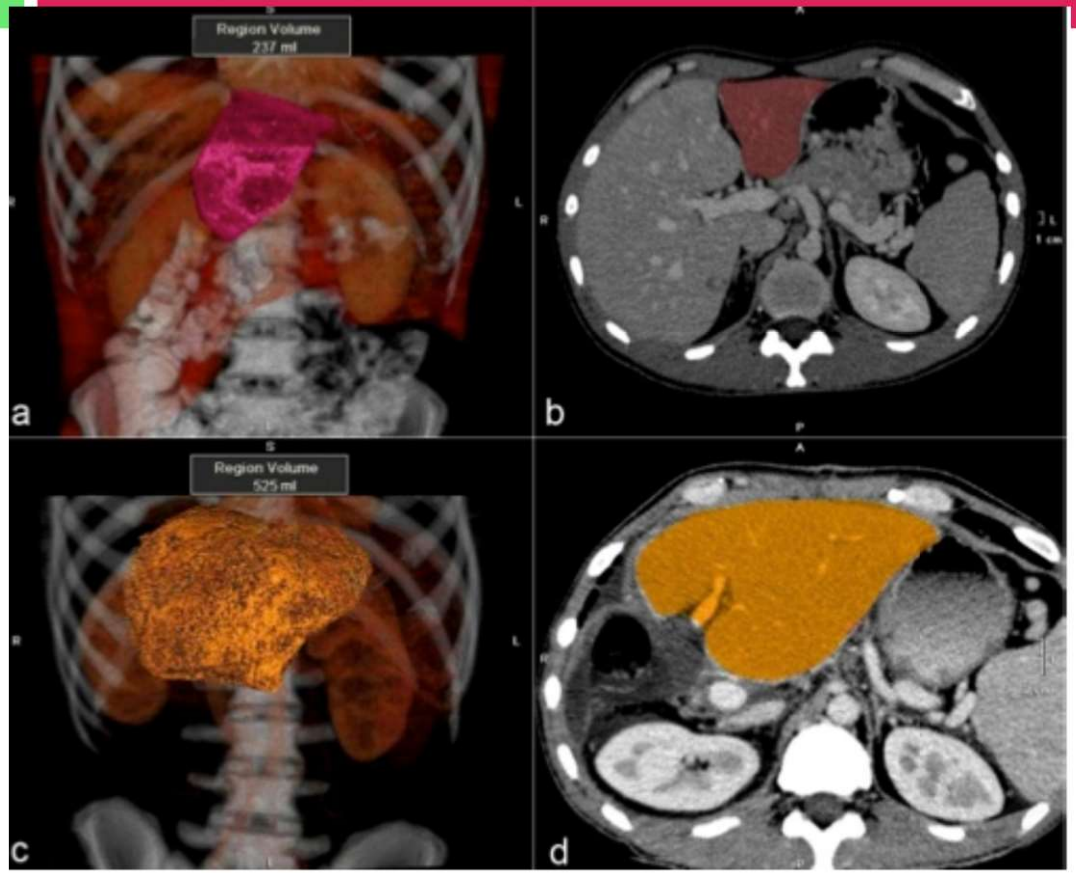


- Hipertrofia do RHF superior à E/LVP, maior factibilidade para ressecção R0.
- Adequada estratificação da doença no 1º procedimento.
- Permite limpeza agressiva do RHF.
- Ressecção simultânea na primeira operação em doença sincrônica.
- O intervalo curto torna pouco provável a progressão tumoral.
- Na progressão tumoral no hemifígado doente, não há invasão por contiguidade.
- Alternativa naqueles que não alcançaram hipertrofia suficiente após a E/LVP.

Ardiles V, et al. In Torres 2015. In press

Hipertrofia maciça e acelerada





Superior à E/LVP

- Homem 35 anos com CRLM.
- FOLFOX-Cetuximab **(14 ciclos)**

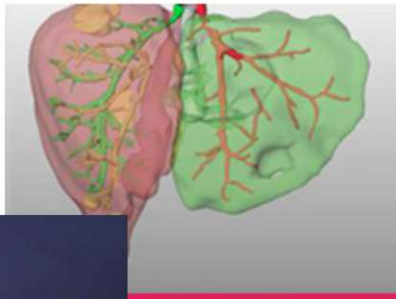
6 dias

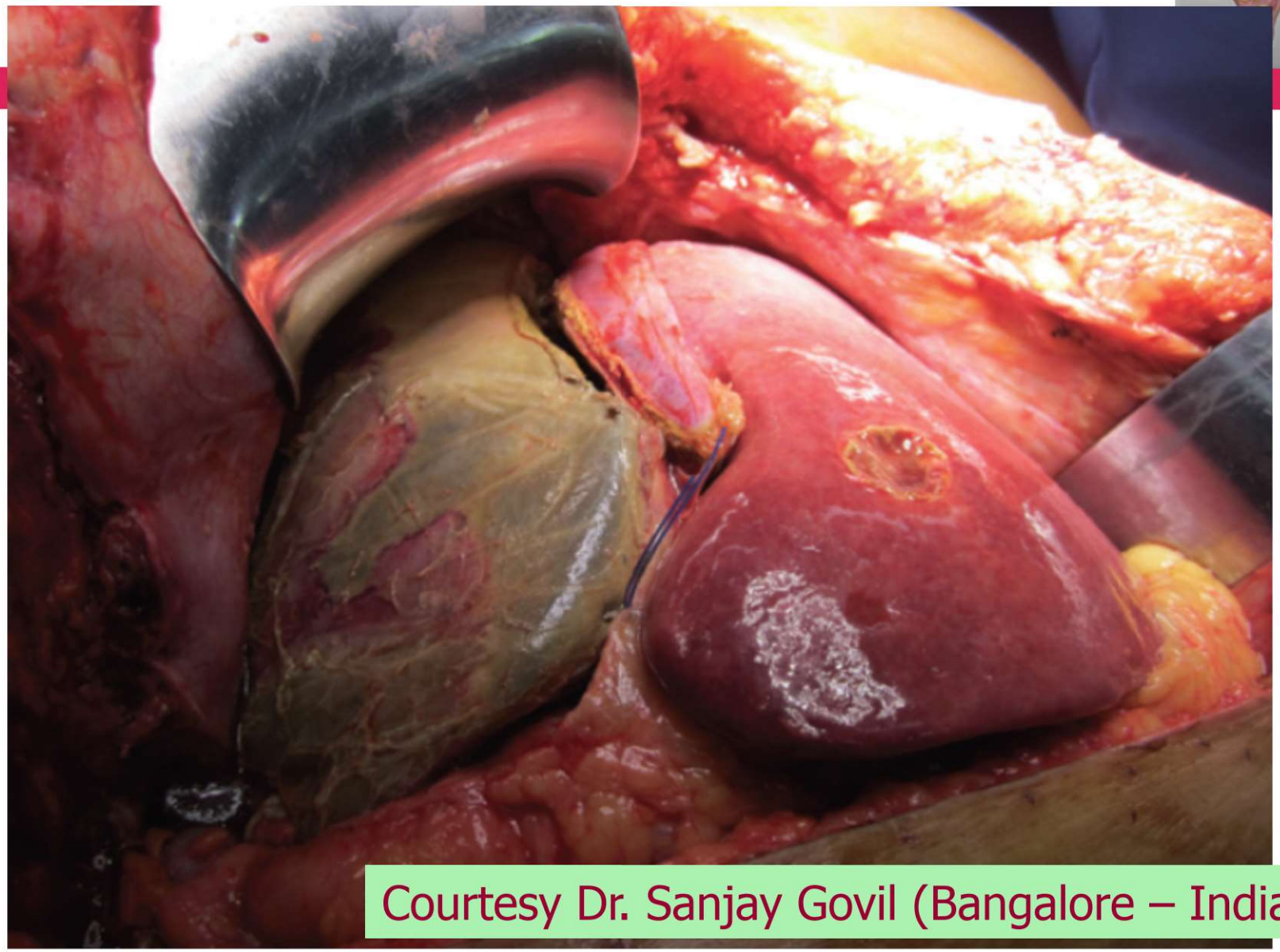
135% hipertrofia

Até 200% de hipertrofia em uma semana

Donati M, et al. Ann Surg. 2012

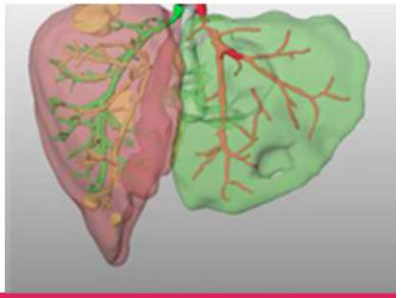
***Ulla M, Ardiles V, de Santibañes E et al**. Hepatogastroenterology 2012*
***Knoefel W T et al**. British Journal of Surgery 2013*





Courtesy Dr. Sanjay Govil (Bangalore – India)

ALPPS



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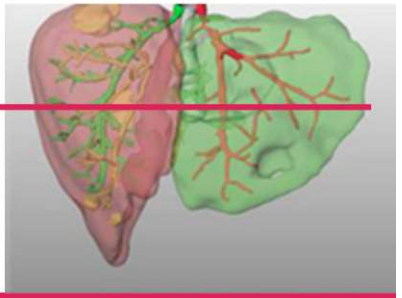
Ardiles V, et al. In Torres 2015. In press

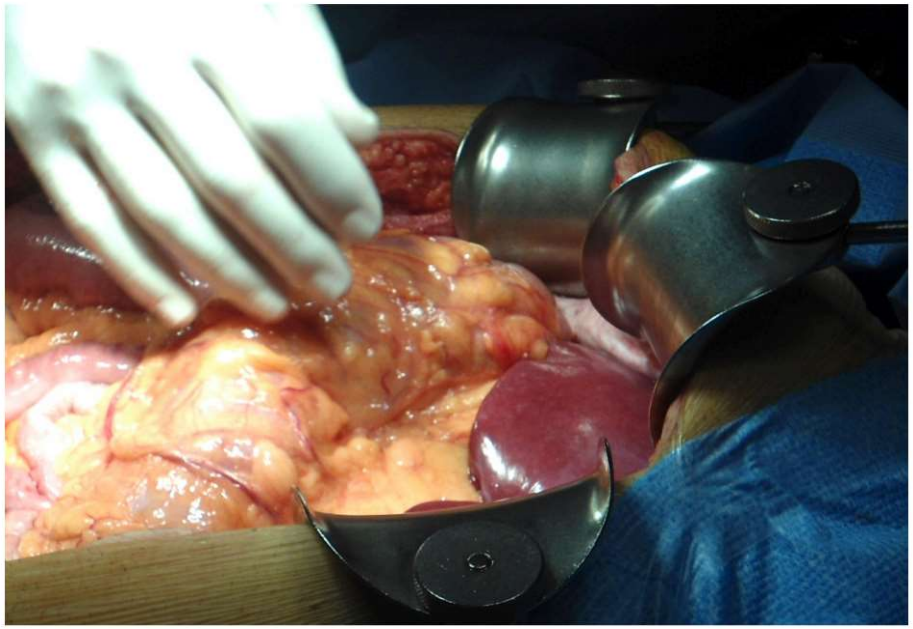
Estratificação adequada

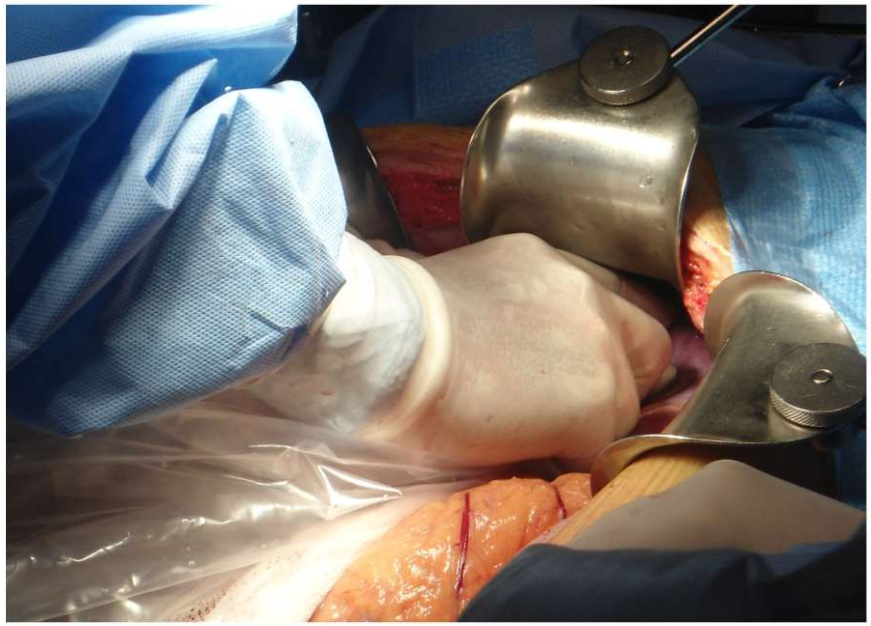


- A exploração durante a primeira cirugia permite excluir enfermidade adicional que pode não ter sido detectada na avaliação pre-operatória.

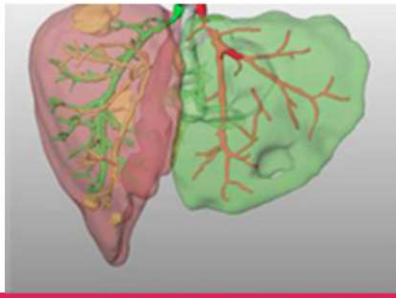
Schnitzbauer A, H. J. Schlitt HJ, et al. *Annals of Surgery 2012*

Alvarez FA, Ardiles V, de Santibañes E et al*. J Gastrointest Surg 2012*





ALPPS



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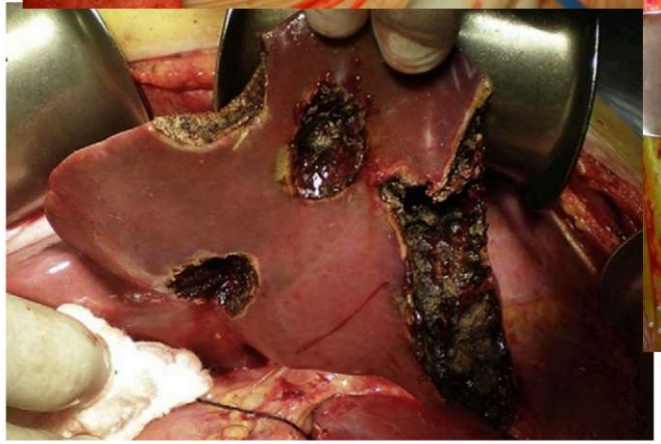
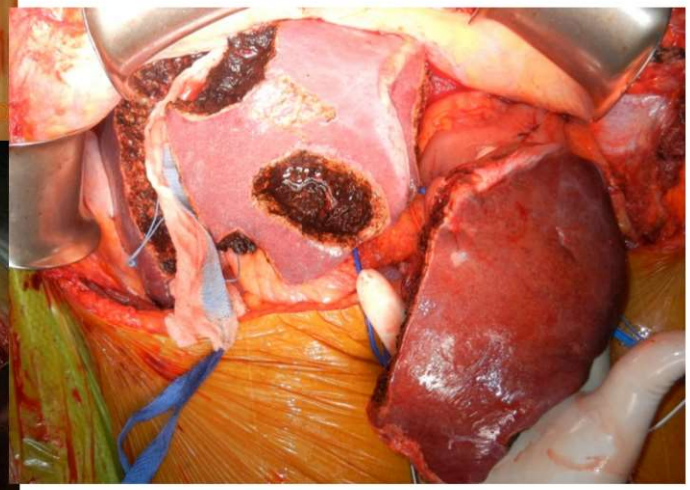
Ardiles V, et al. In Torres 2015. In press

Limpeza agressiva do remanescente

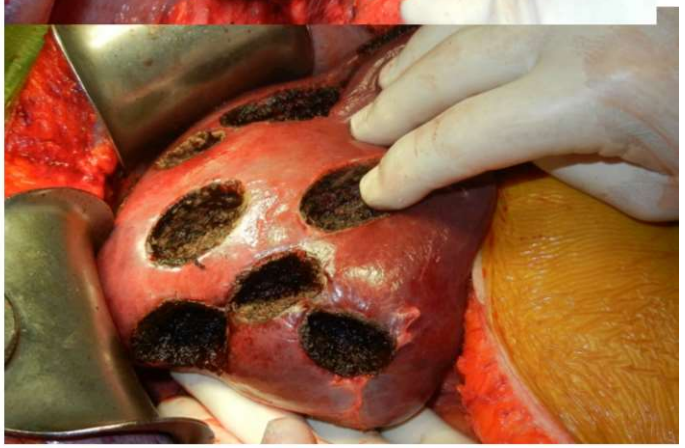
ALPPS direito



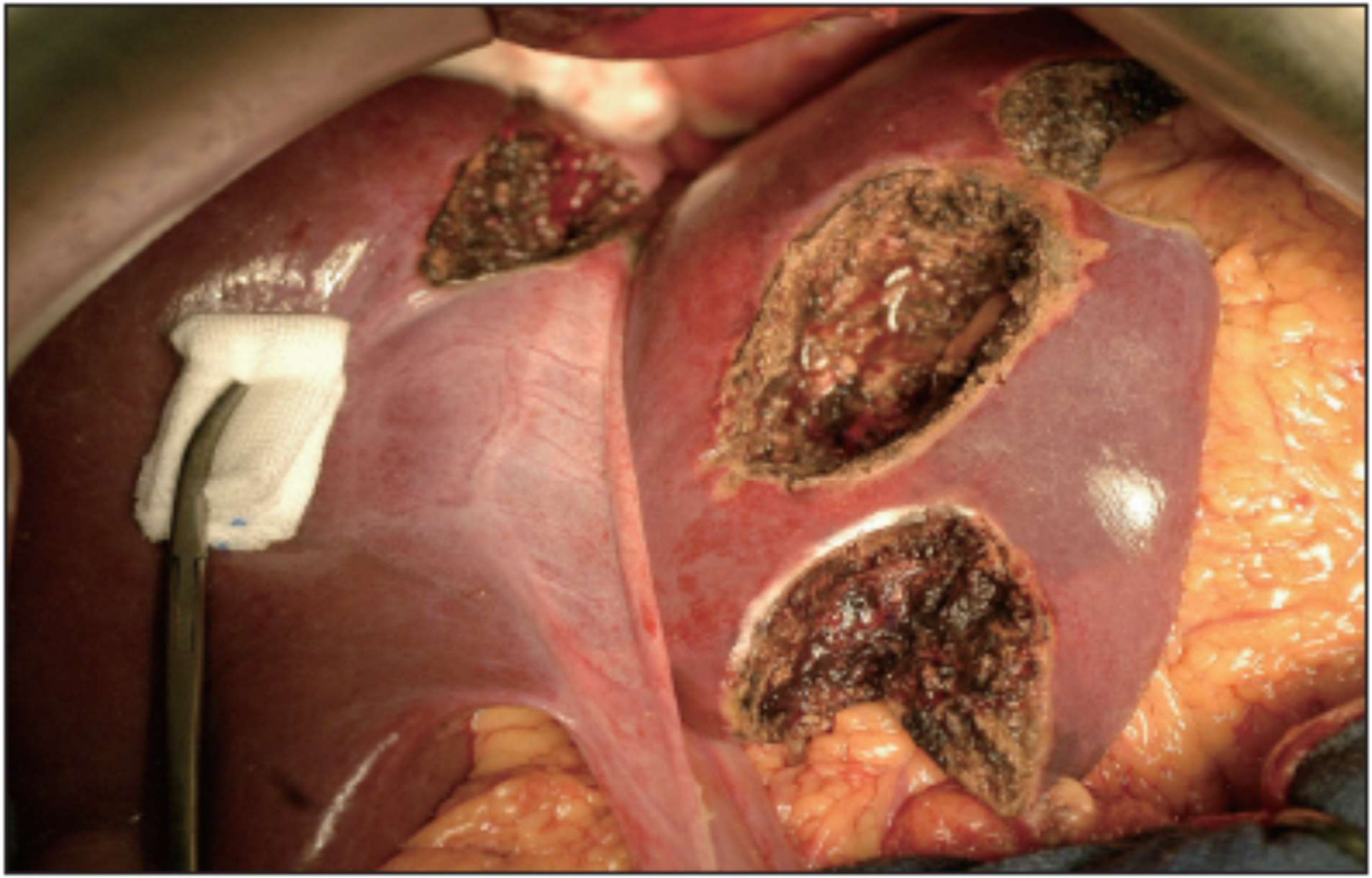
Central



ALPPS esquerdo

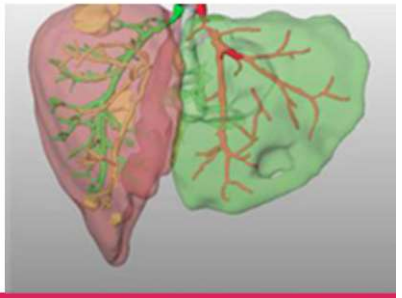


de Santibañes E, Clavien PA. *Ann Surg 2012.*
de Santibañes E, Alvarez FA, Ardiles V. *World J Surg 2012*
Alvarez FA, Ardiles V, de Santibañes E et al. JOGS 2012



Torzilli G, et al. Liver Cancer 2017;6:80-9

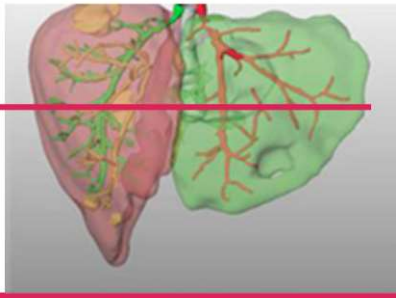
ALPPS



- Hipertrofia do RHF superior à E/LVP, maior factibilidade para ressecção R0.
- Adequada estratificação da doença no 1º procedimento.
- Permite limpeza agressiva do RHF.
- Ressecção simultânea na primeira operação em doença sincrônica.
- O intervalo curto torna pouco provável a progressão tumoral.
- Na progressão tumoral no hemifígado doente, não há invasão por contiguidade.
- Alternativa naqueles que não alcançaram hipertrofia suficiente após a E/LVP.

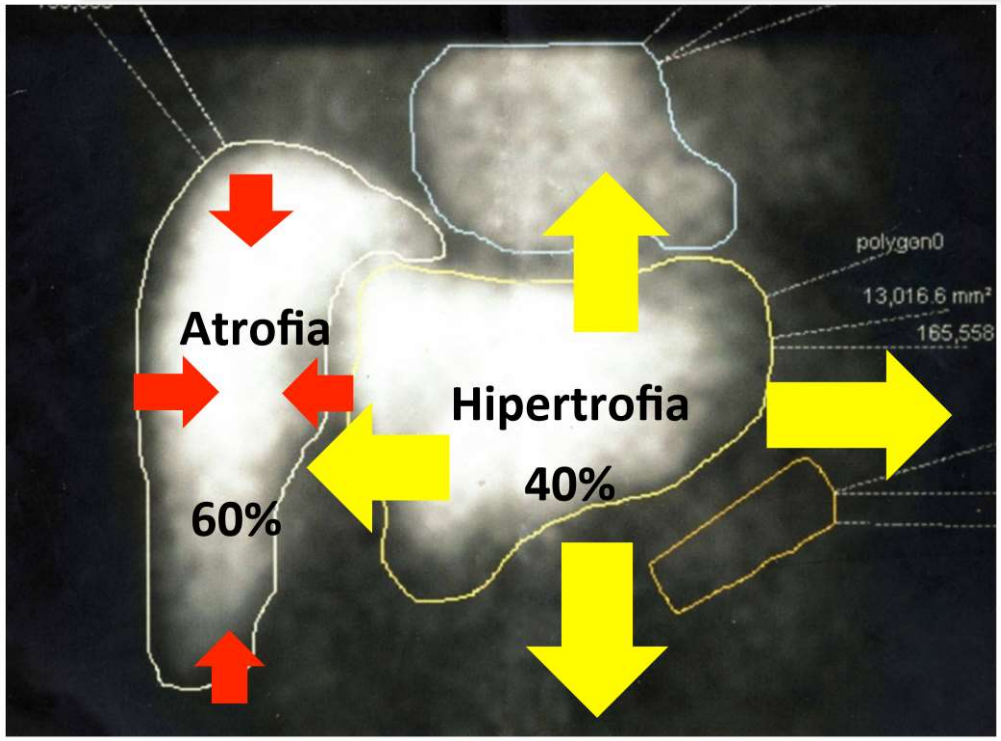
Ardiles V, et al. In Torres 2015. In press

Fígado auxiliar temporário

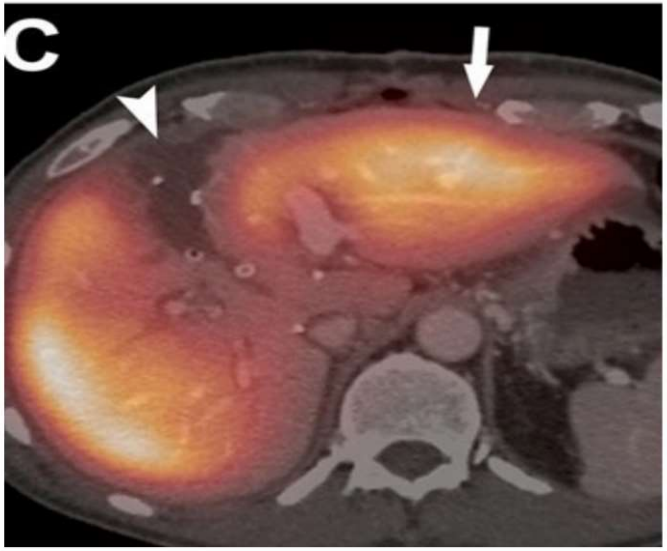


How to Avoid Postoperative Liver Failure: A Novel Method

Eduardo de Santibañes · Fernando A. Alvarez · Victoria Ardiles

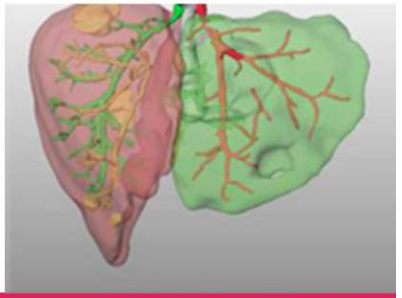


Fígado doente responsável por 60% da função total até o 6º dia



Dokmak S, Belghiti J. *Ann Surg 2012.*
de Santibañes E, Alvarez FA, Ardiles V. *World J Surg 2012.*

ALPPS



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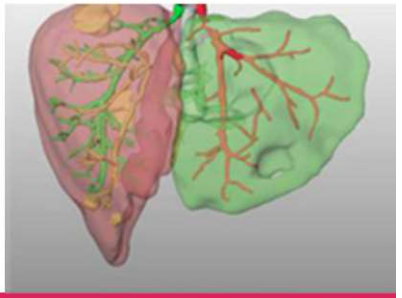
Ardiles V, et al. In Torres 2015. In press

ALPPS



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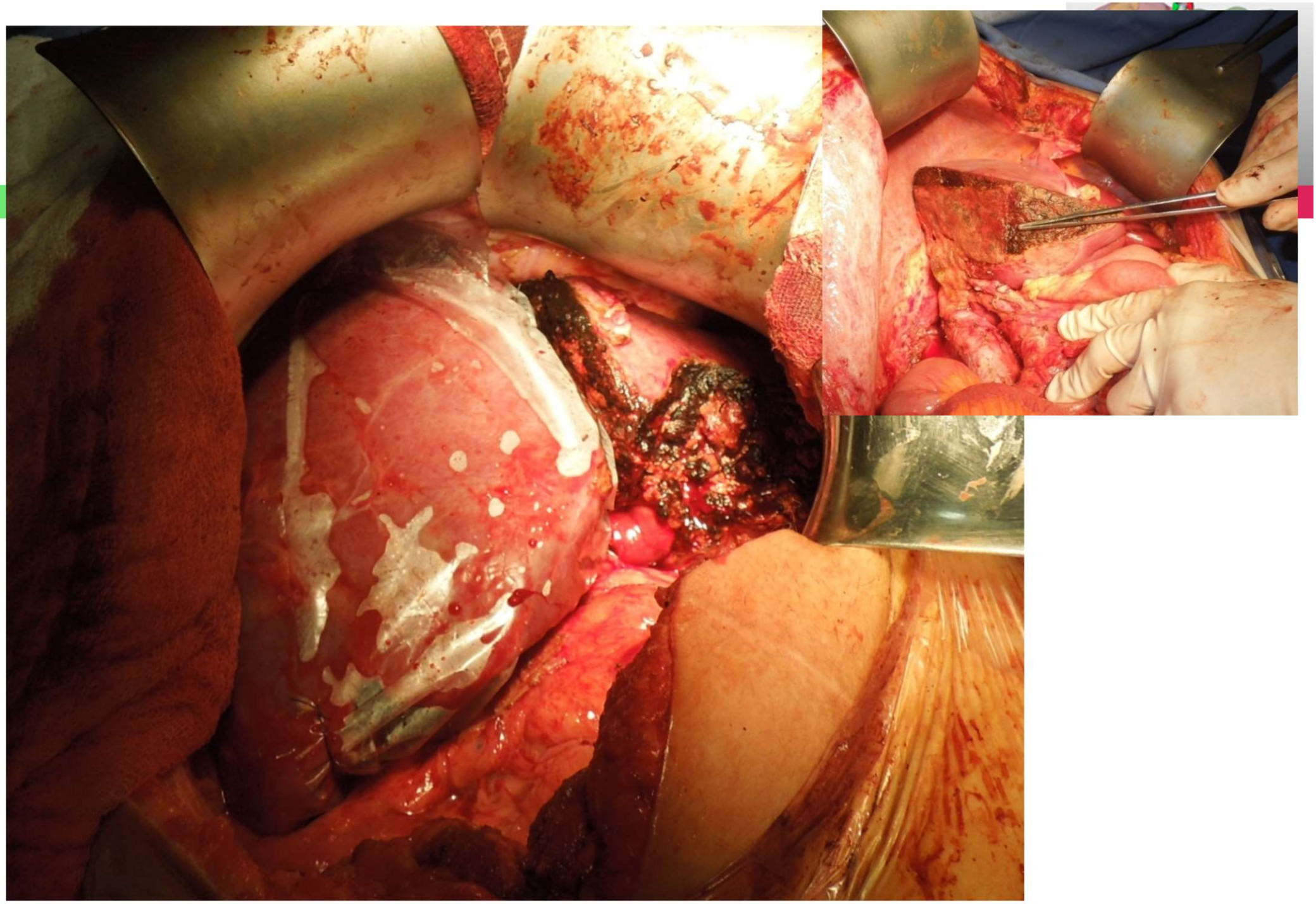
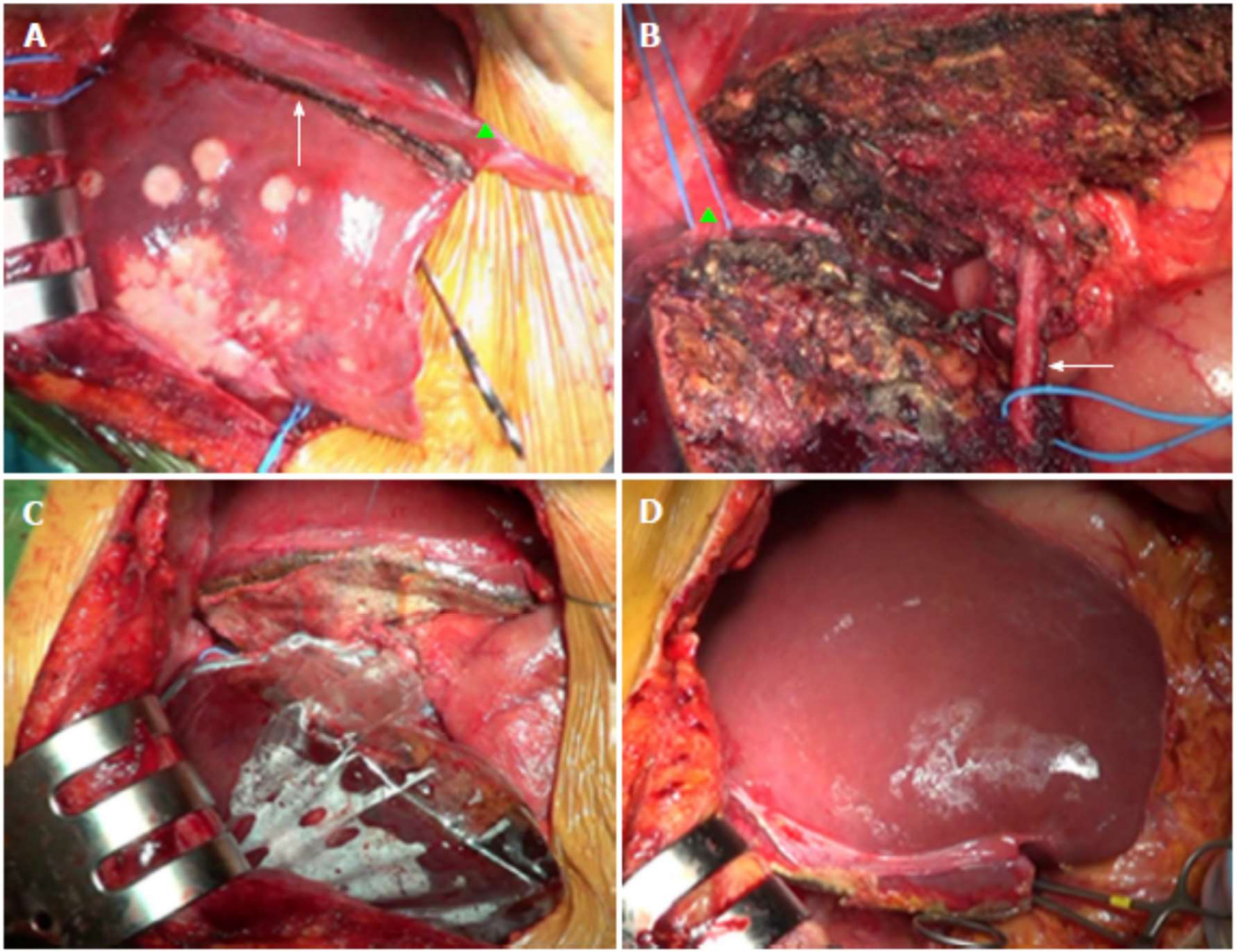
Ardiles V, et al. In Torres 2015. In press

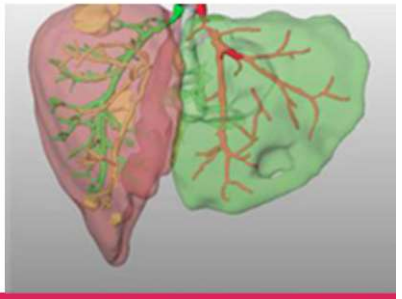


Torres OJ, et al. Arq Bras Cir Dig 2012;25:290-2



Zerial M, et al. World J Hepatol 2017;9:733-45

ALPPS



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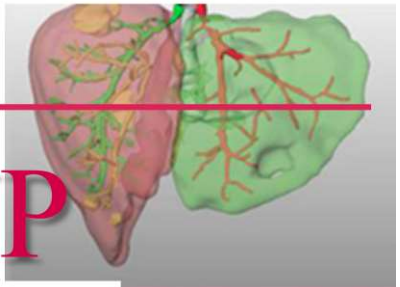
Ardiles V, et al. In Torres 2015. In press



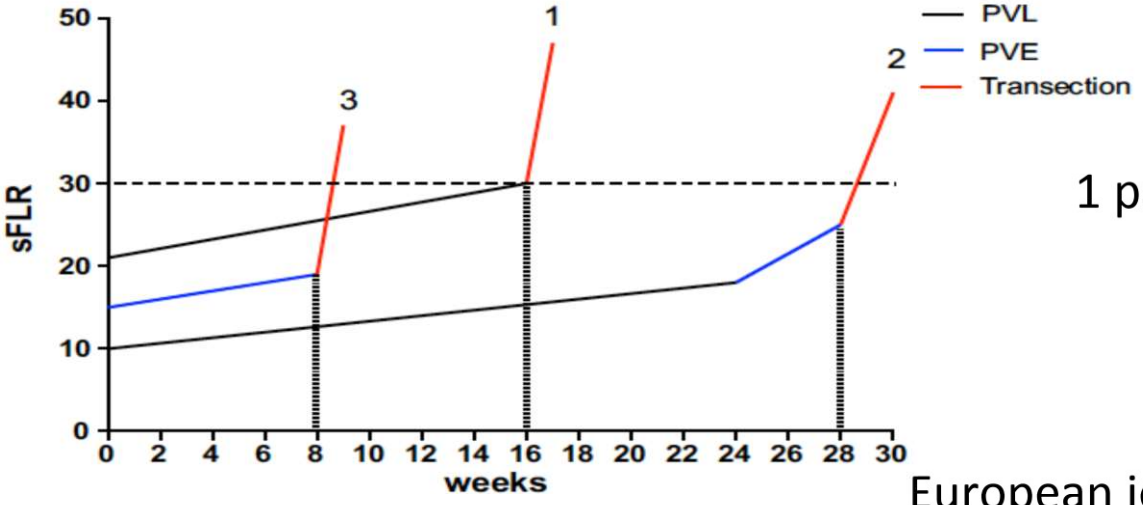
ALPPS no resgate da EVP/LVP

Salvage Parenchymal Liver Transection for patients with

Insufficient volume increase after Portal Vein occlusion

- An extension of the ALPPS approach -

hristoph Tschuor*&, MD, Kris P. Croome#&, MD, Gregory Sergeant*, MD, PhD, Virginia Cano+, MD,
ik Schadde*, MD, Victoria Ardiles+, MD, Ksenija Slankamenac*, MD, Rodrigo Sanchez Clariá +, MD,
Eduardo de Santibañes +, MD, PhD, Roberto Hernandez-Alejandro #&, MD and
Pierre-Alain Clavien *&, MD, PhD



1 paciente com PVL- PVE (S4) e embolização veia suprahepática direita.

European journal of Surgical Oncology 2013

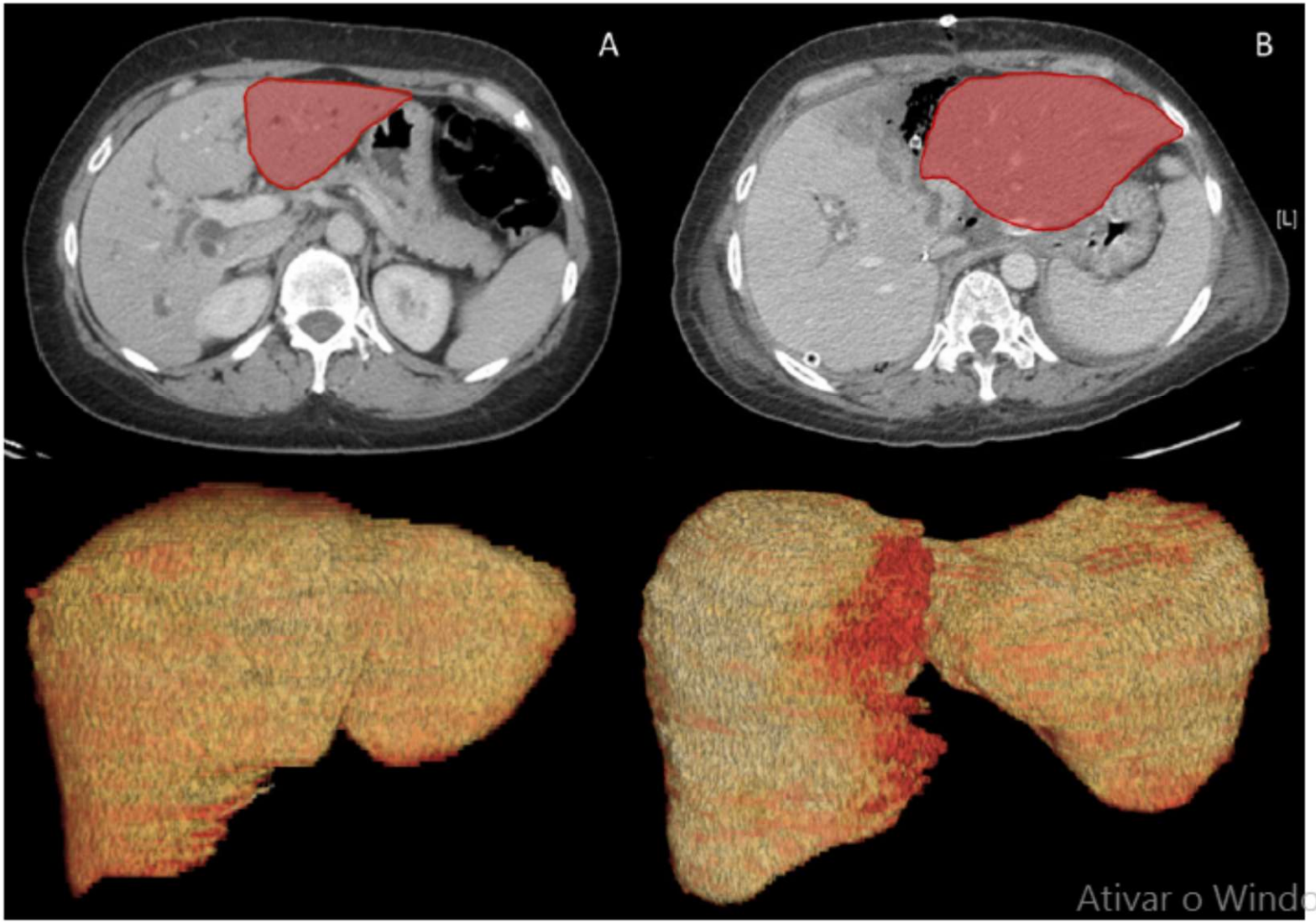


Fig 1. Case #1. FLR before ALPPS-1 (A) and after 6 days (B) in a patient with pC

Vivarelli M, et al. 2015

ABCD Arq Bras Cir Dig
2016;29(3):173-179
DOI: /10.1590/0102-6720201600030011

Original Article

BRAZILIAN CONSENSUS FOR MULTIMODAL TREATMENT OF COLORECTAL LIVER METASTASES. MODULE 3: CONTROVERSIES AND UNRESECTABLE METASTASES

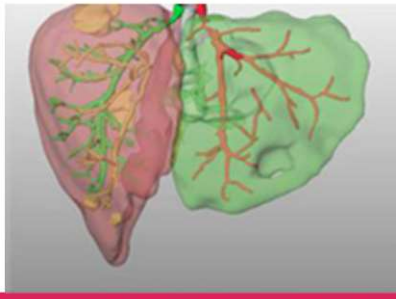
Consenso brasileiro de tratamento multidisciplinar de metástase hepática de origem colorretal
Módulo 3: Controvérsias e metástases irressecáveis

Orlando Jorge Martins **TORRES**[1,2,6], Márcio Carmona **MARQUES**[2,6], Fabio Nasser **SANTOS**[1], Igor Correia de **FARIAS**[2,6], Anelisa Kruschewsky **COUTINHO**[3], Cássio Virgílio Cavalcante de **OLIVEIRA**[1,4,5], Antonio Nocchi **KALIL**[1,2,4,6], Celso Abdon Lopes de **MELLO**[3], Jaime Arthur Pirola **KRUGER**[1,4,5,6], Gustavo dos Santos **FERNANDES**[3], Claudemiro **QUIREZE JR**[1,4,5,6], André M. **MURAD**[3], Milton José de **BARROS E SILVA**[3], Charles Edouard **ZURSTRASSEN**[*], Helano Carioca **FREITAS**[3], Marcelo Rocha **CRUZ**[3], Rui **WESCHENFELDER**[3], Marcelo Moura **LINHARES**[1,4,5,6], Leonaldson dos Santos **CASTRO**[1,2,6], Charles **VOLLMER**[6], Elijah **DIXON**[6], Héber Salvador de Castro **RIBEIRO**[1,2,6], Felipe José Fernandez **COIMBRA**[1,2,5,6]

ALPPS

- Alternativa para hepatectomia em dois tempos.
- Resgate pós embolização da veia porta.

ALPPS team



Right Portal Vein Ligation Combined With In Situ Splitting Induces Rapid Left Lateral Liver Lobe Hypertrophy Enabling 2-Staged Extended Right Hepatic Resection in Small-for-Size Settings

Andreas A. Schnitzbauer, MD, Sven A. Lang, MD,* Holger Goessmann, MD,† Silvio Nadalin, MD,§ Janine Baumgart, MD,|| Stefan A. Farkas, MD,* Stefan Fichtner-Feigl, MD,* Thomas Lorf, MD,¶ Armin Goralcyk, MD,¶ Rüdiger Hörbelt, MD,# Alexander Kroemer, MD,* Martin Loss, MD,* Petra Rümmele, MD,‡ Marcus N. Scherer, MD,* Winfried Padberg, MD,# Alfred Königsrainer, MD,§ Hauke Lang, MD,|| Aiman Obed, MD,¶ and Hans J. Schlitt, MD**

Críticas

ABCDDV/898

ABCD Arq Bras Cir Dig
2013;26(1):40-43

Original Article

ASSOCIATING LIVER PARTITION AND PORTAL VEIN LIGATION FOR STAGED HEPATECTOMY (ALPPS): THE BRAZILIAN EXPERIENCE

Ligadura da veia porta associada à bipartição do fígado para hepatectomia em dois estágios (ALPPS): experiência Brasileira

Orlando Jorge Martins **TORRES**[1], Eduardo de Souza Martins **FERNANDES**[2] Cassio Virgilio Cavalcante **OLIVEIRA** Cristiano Xavier **LIMA**[4], Fabio Luiz **WAECHTER**[5], Jose Maria Assunção **MORAES-JUNIOR**[1], Marcelo Moura **LINHARES**[6], Rinaldo Danese **PINTO**[7], Paulo **HERMAN**[8], Marcel Autran Cesar **MACHADO**[9]

- 59 e 64% Complicação
- 12 e 12,8% Mortalidade

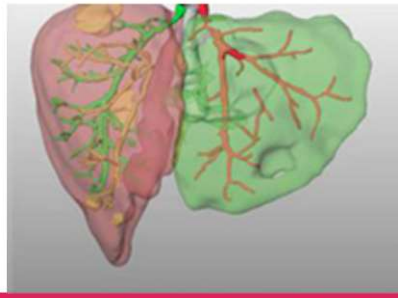
TABLE 108D.1 Degree of Hypertrophy After Stage 1 of ALPPS Procedure

Series	No. Patients	Interval Stage (mean days)	Degree of Hypertrophy (%)
Schnitzbauer et al, 2012	25	9	74
Knoefel et al, 2013	7	6	63
Li et al, 2013	9	13	87.20
Nadalin et al, 2014	15	10	87.2
Torres et al, 2013	39	14.1	83
Robles Campos et al, 2014	22*	7	61
Alvarez et al, 2015	30	6	89.7
Hernandez-Alejandro et al, 2015	14	8	93

*Associating liver tourniquet and portal ligation for staged hepatectomy (ALTPS).

ALPPS, Associating liver partition and portal vein ligation for staged hepatectomy.

Oldhafer KJ, et al. In Blumgart LH. 6th Edition, 2017



ORIGINAL ARTICLE

Associating Liver Partition and Portal Vein Ligation for Staged Hepatectomy Offers High Oncological Feasibility With Adequate Patient Safety

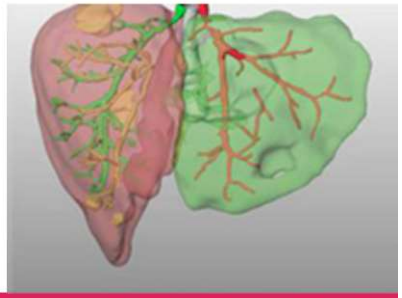
A Prospective Study at a Single Center

Fernando A. Alvarez, MD, Victoria Ardiles, MD, Martin de Santibañes, MD, Juan Pekolj, MD, PhD, and Eduardo de Santibañes, MD, PhD

53% Morbidade
6,6% Mortalidade

Alvarez FA, et al. Ann Surg 2014

ALPPS Registry



PAPER OF THE 21ST ANNUAL ESA MEETING

Early Survival and Safety of ALPPS

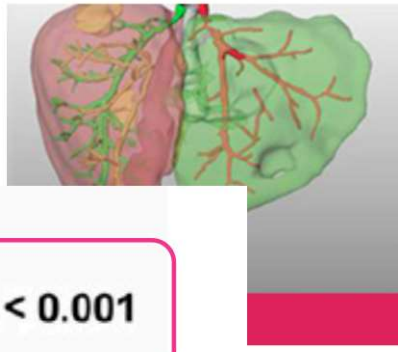
First Report of the International ALPPS Registry

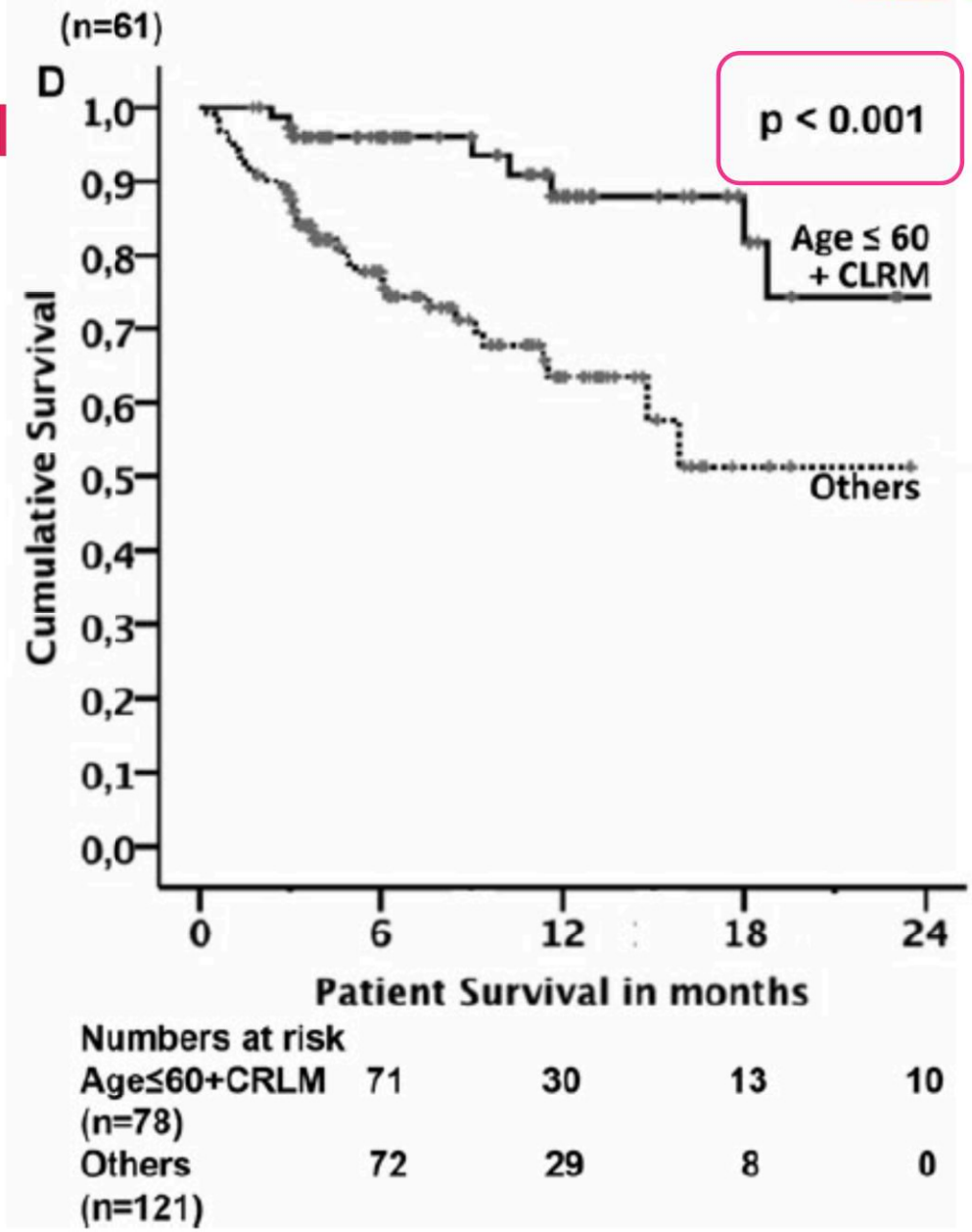
Erik Schadde, MD, FACS, Victoria Ardiles, MD,† Ricardo Robles-Campos, MD,‡ Massimo Malago, MD, FACS,§ Marcel Machado, MD,¶ Roberto Hernandez-Alejandro, MD,‖ Olivier Soubrane, MD,** Andreas A. Schnitzbauer, MD,†† Dimitri Raptis, MD,* Christoph Tschuor, MD,* Henrik Petrowsky, MD, FACS,* Eduardo De Santibanes, MD, PhD, FACS,† and Pierre-Alain Clavien, MD, PhD, FACS*§§; On behalf of the ALPPS Registry Group*

40 % Morbidade
9 % Mortalidade

Schadde E, et al. Ann Surg 2014;260:829-38

ALPPS Registry





Schadde E, et al. Ann Surg 2014;260:829-38

International Journal of Surgery Case Reports 26 (2016) 113–117

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

The ALPPS procedure for hepatocellular carcinoma larger than 10 centimeters

Orlando Jorge M. Torres*, Rodrigo Rodrigues Vasques, Thiago Henrique S. Silva, Miguel Eugenio L. Castelo-Branco, Camila Cristina S. Torres

Department of Digestive Surgery, Federal University of Maranhão, São Luiz, MA, Brazil

ARTICLE INFO

Article history:
Received 10 June 2016

ABSTRACT

INTRODUCTION: The only means of achieving long-term survival in hepatocellular carcinoma is complete tumor resection or liver transplantation. Patients with large hepatocellular carcinomas are currently

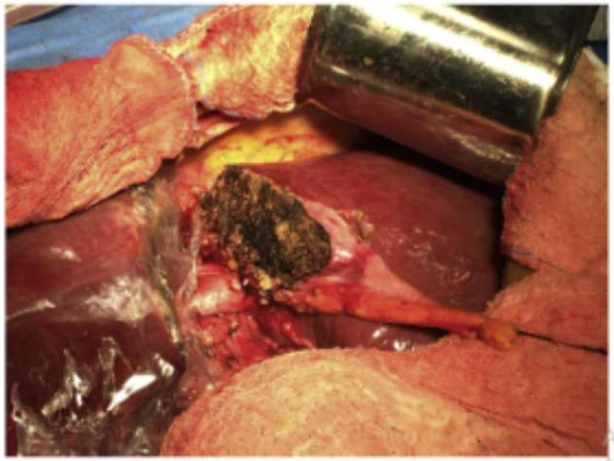


Fig. 2. ALPPS first procedure with plastic bag.

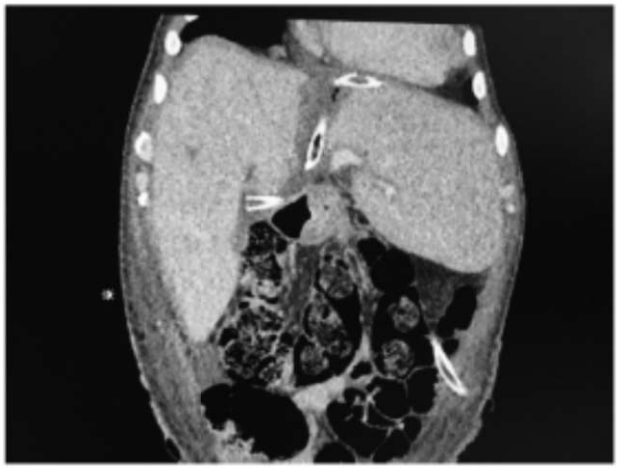


Fig. 3. CT 15 days after the first procedure.

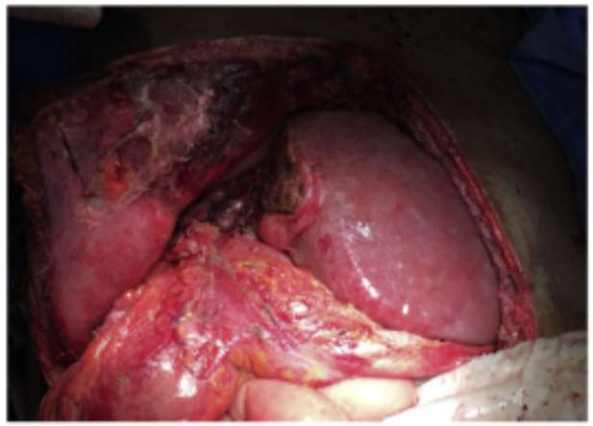
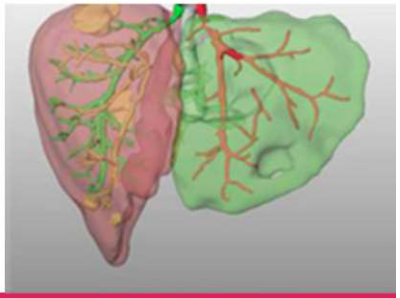


Fig. 4. Final aspect of the liver remnant.

Torres OJ, et al. Int J Surg Case Rep 2016;26:113-7

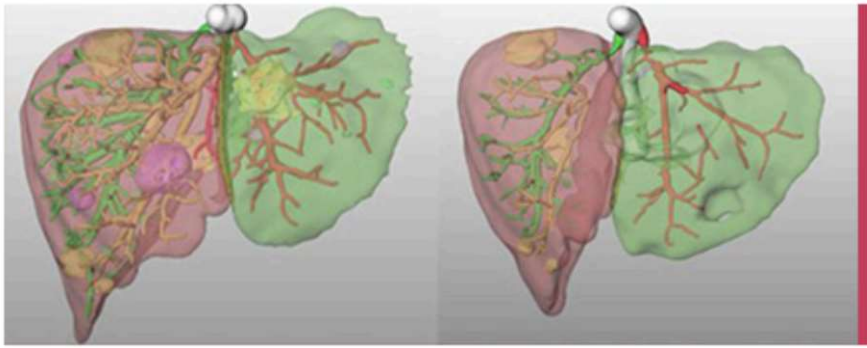


Can we improve the morbidity and mortality associated with the associating liver partition with portal vein ligation for staged hepatectomy (ALPPS) procedure in the management of colorectal liver metastases?

Roberto Hernandez-Alejandro, MD,[a] Kimberly A. Bertens, MD, MPH,[a] Karen Pineda-Solis, MD,[a] *and* Kristopher P. Croome, MD, MS,[a,b] *London, Ontario, Canada, and Rochester, MN*

- 36 % Morbidade
- 0 % Mortalidade

Hernandez-Alejandro R, et al. Surgery 2014



1 st International Consensus Meeting on ALPPS

February 27th and 28th 2015, Hamburg, Germany

Karl J. Oldhafer

Thomas van Gulik

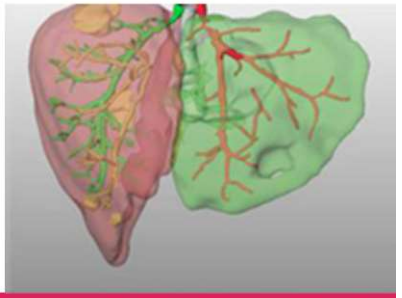
E-AHPBA

European-African Hepato-Pancreato-Biliary Association

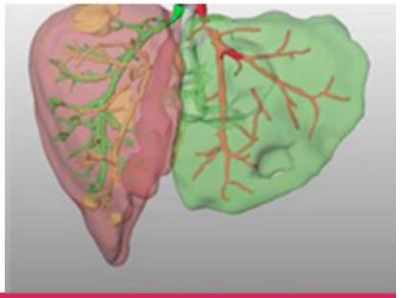
Supported with a grant of DFG

DFG Deutsche Forschungsgemeinschaft

Brazilians in Hamburg



INDICAÇÕES/SELEÇÃO



- Metástase hepática colo-retal extensa
- ALPPS de resgate (fracasso da EVP)
- Doença bilobar (contra-indicação para EVP)
- Extensão tumoral inesperada
- Remanescente hepático < 30% (ou < 0,5% do peso corporal)
- Hepatectomia direita ampliada
- Necessidade de grande hipertrofia
- Idade ≤ 60 anos
- Margem do tumor próximo ao remanescente

Ardiles V, et al. In Torres 2015. In press

ABCDDV/898

ABCD Arq Bras Cir Dig
2013;26(1):40-43

Original Article

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- Morbidade – 59%
- Colangiocarcinoma
- Associação:
  - Colectomia
  - Duodenopancreatectomia
- Mortalidade – 12,8%

Torres OJ, et al. Arq Bras Cir Dig 2013;26:40-3

ABCDDV/1112

ABCD Arq Bras Cir Dig
2015;28(3):155-156
DOI: /10.1590/S0102-67202015000300001

Editorial

ALPPS: PAST, PRESENT AND FUTURE

ALPPS: passado, presente e futuro

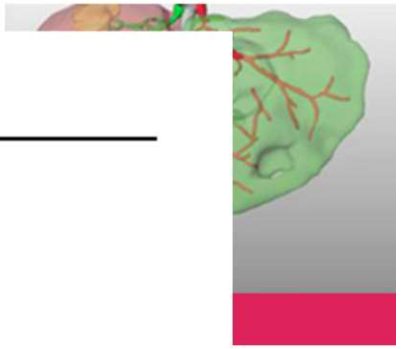
Orlando Jorge M **TORRES**[1], Eduardo S M **FERNANDES**[2], Paulo **HERMAN**[3]

[1]Universidade Federal do Maranhão (Federal University of Maranhão), São Luís, MA; [2] Hospital Adventista Silvestre, Rio de Janeiro, RJ, Brazil; [3]Universidade de São Paulo (University of São Paulo), São Paulo, SP, Brazil.

Complete tumor resection in the liver is the only chance to obtain long-term survival in patients with hepatic tumor or metastasis from other primary cancers. In patients with a large load of tumor within the liver, multiple strategies have been employed to improve resection, especially when a small liver remnant is expected. Staged hepatectomies, in

- ❑ Discutir em reunião multidisciplinar
- ❑ Remanescente < 30%
- ❑ Resgate após falha na embolização de veia porta
- ❑ Evitar em colangiocarcinoma
- ❑ Reduzir morbidade e mortalidade

Torres OJ, et al. Arq Bras Cir Dig 2015;28:155-6



LETTER-PRELIMINARY REPORT/TECHNIQUE

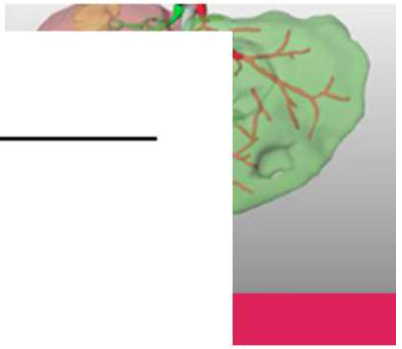
Is Partial-ALPPS Safer Than ALPPS?

A Single-Center Experience

Henrik Petrowsky, MD, FACS, Georg Györi, MD,* Michelle de Oliveira, MD, FACS,* Mickaël Lesurtel, MD, PhD,* and Pierre-Alain Clavien, MD, PhD, FACS†*

- 50- 80% transecção
- Nível das veias hepáticas
- Utilizar abordagem anterior
- Tumor localizado dentro ou próximo da linha de transecção

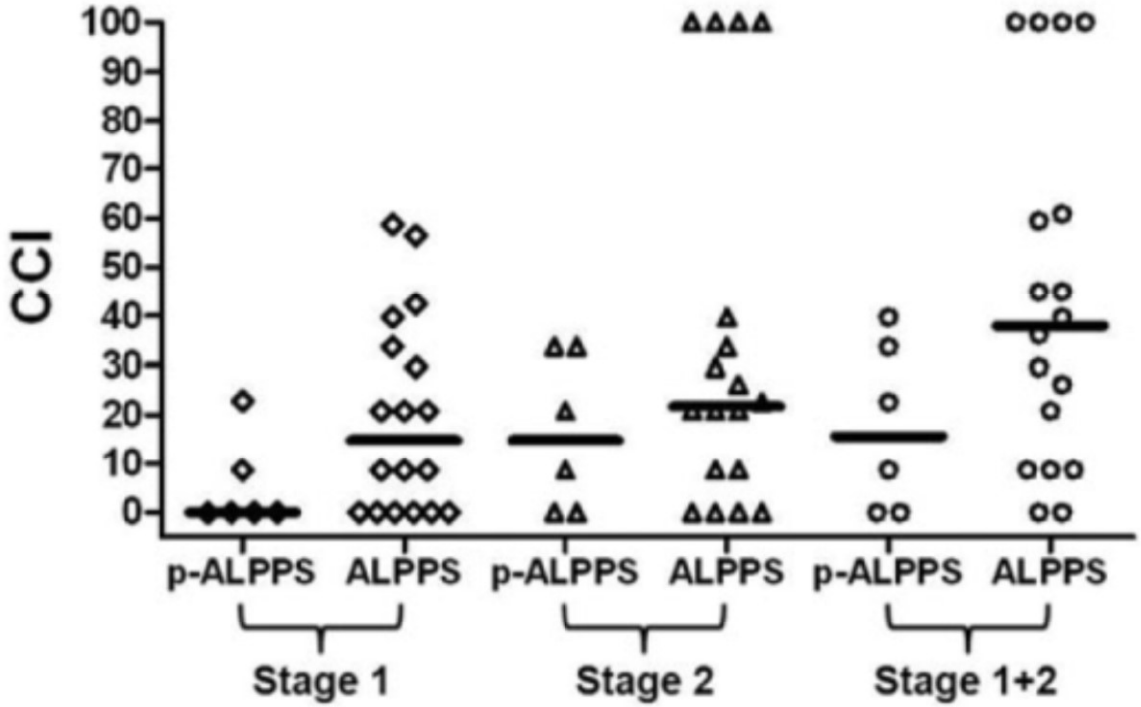
Petrowsky H, et al. Ann Surg 2015;261:e90-e92



Is Partial-ALPPS Safer Than ALPPS?

A Single-Center Experience

Henrik Petrowsky, MD, FACS, Georg Györi, MD,* Michelle de Oliveira, MD, FACS,* Mickaël Lesurtel, MD, PhD,* and Pierre-Alain Clavien, MD, PhD, FACS†*



Petrowsky H, et al. Ann Surg 2015;261:e90-e92

LETTER-PRELIMINARY REPORT/TECHNIQUE

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	p-ALPPS	ALPPS
Hipertrofia	60 %	61%
Complicações severas	0 %	33 %
Mortalidade	0 %	22 %

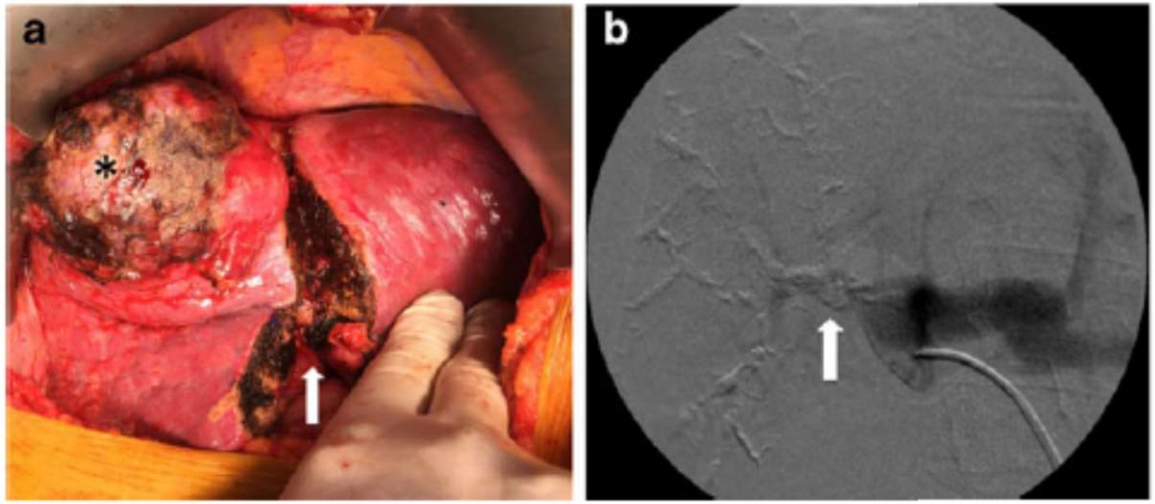
Petrowsky H, et al. Ann Surg 2015;261:e90-e92

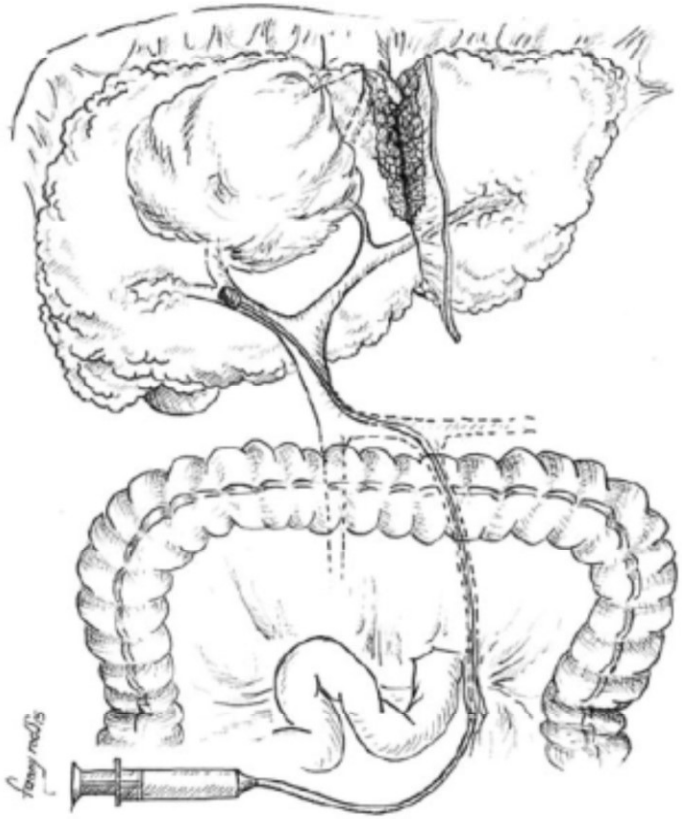
Langenbecks Arch Surg
DOI 10.1007/s00423-016-1424-1

HOW-I-DO-IT ARTICLES

Inverting the ALPPS paradigm by minimizing first stage impact: the Mini-ALPPS technique

Eduardo de Santibañes[1,2] · Fernando A. Alvarez[1] · Victoria Ardiles[1] · Juan Pekolj[1] · Martin de Santibañes[1]





de Santibanes E, et al. Langenbecks Arch Surg 2016

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HOW-I-DO-IT ARTICLES

Inverting the ALPPS paradigm by minimizing first stage impact: the Mini-ALPPS technique

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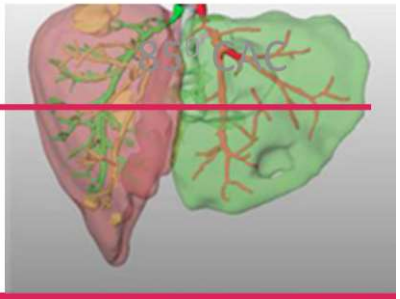
Table 1 Patients characteristics and volumetric data

Patient	Sex	Age	Diagnosis	Preop chemotherapy (cycles)	Hepatectomy type	FLR/TLV (%) pre	FLR pre (cc)	FLR post (cc)	Hypertrophy (%)	KGR (cc/day)	Interval (days)[a]
1	Female	66	HCC	–	RTS	40	510	778	52.5	26.8	10
2	Female	71	CRLM	FOLFOX (6)	RTS + FLR clean-up	23	235	420	78.7	12.3	15
3	Female	44	CRLM	FOLFOX + BEV (6)	RTS + FLR clean-up	27	300	427	70	9.8	13
4	Male	61	CRLM	FOLFOX (4)/ FOLFIRI + BEV (3)	RH + FLR clean-up	28	530	792	49.4	43.6	6

HCC hepatocellular carcinoma, *CRLM* colorectal liver metastases, *BEV* bevacizumab, *RTS* right trisectionectomy, *RH* right hepatectomy, *FLR* future liver remnant, *KGR* Kinetic growth rate

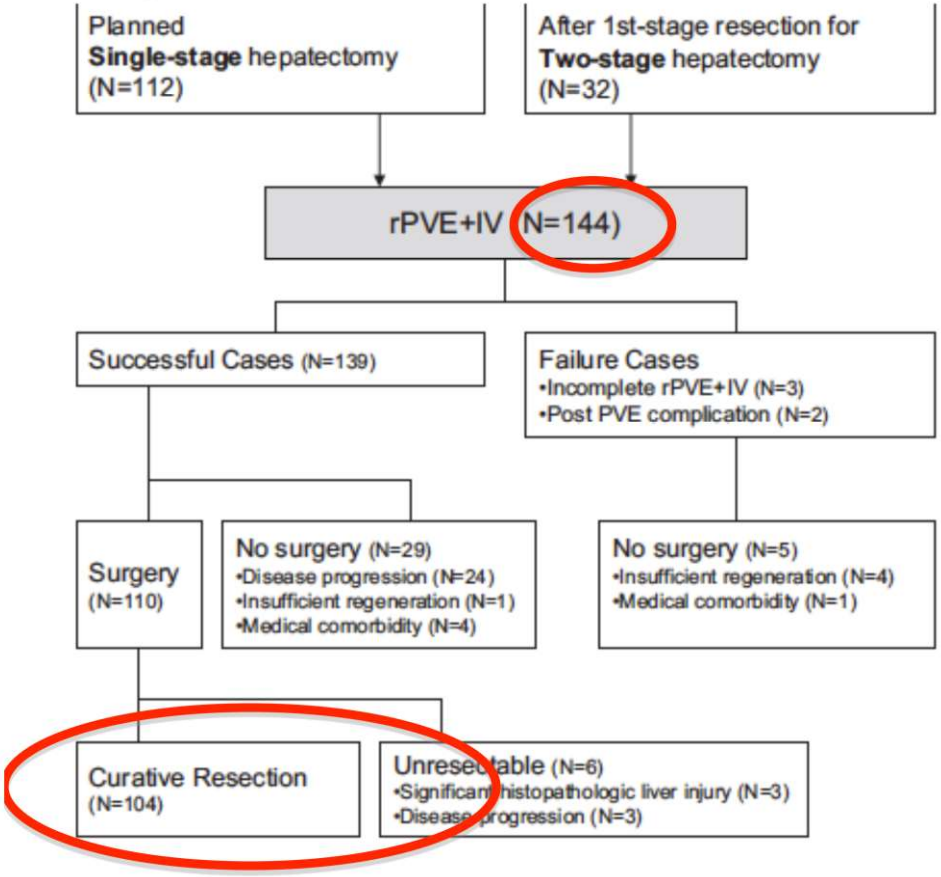
[a] Internal between the first stage and the last volumetric evaluation before the second stage

de Santibanes E, et al. Langenbecks Arch Surg 2016



Analysis of the Efficacy of Portal Vein Embolization for Patients with Extensive Liver Malignancy and Very Low Future Liver Remnant Volume, Including a Comparison with the Associating Liver Partition with Portal Vein Ligation for Staged Hepatectomy Approach

Junichi Shindoh, MD, PhD, Jean-Nicolas Vauthey, MD, FACS, Giuzeppe Zimmitti, MD, Steven A Curley, MD, FACS, Steven Y Huang, MD, Armeen Mahvash, MD, Sanjay Gupta, MD, Michael J Wallace, MD, Thomas A Aloia, MD, FACS



77%

ALPPS * 96%

- hipertrofia: 62%

89%

ALPPS*

- Morbilidad:

total: 57%

Mayor: 32.7%

ALPPS * 30%

- Mortalidad:

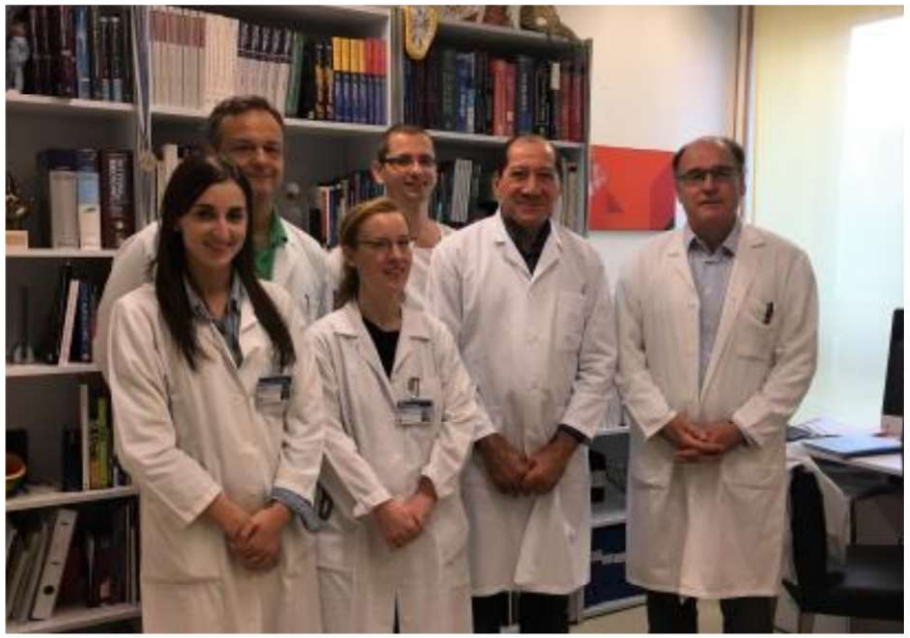
global: 8.6%

ALPPS * 6.6%

Courtesy Dr. Eduardo de Santibanes
(Buenos Aires – Argentina)

*** Experiencia Hospital italiano de Buenos Aires**


ALPES SUÍÇOS



12th Biennial E-AHPBA Congress 2017
European-African Hepato Pancreato Biliary Association
23 May – 26 May, 2017

Liver surgery: Clinical
FP26.08

Performance Validation of the ALPPS Risk Model

M. Linecker[1], P. Kambakamba[1], A. Schlegel[2], P. Muiesan[2], I. Capobianco[3], S. Nadalin[3], O. Torres[4], A. Mehrabi[5], G.A. Stavrou[6, 7], K.J. Oldhafer[6, 7], G. Lurje[8], U. Neumann[8], R. Robles-Campos[9], R. Hernandez-Alejandro[10, 11], M. Malago[12], E. De Santibanes[13], P.-A. Clavien[1], H. Petrowsky[1]
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- Autores de 8 países (1 Brasileiro)
- Estratégia para tornar o procedimento mais seguro

Linecker M, et al. E-AHPBA 2017

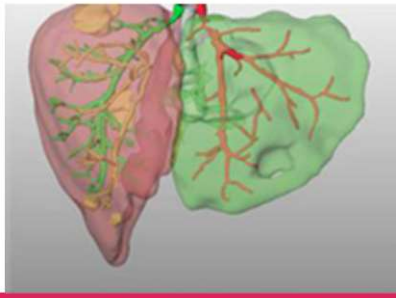
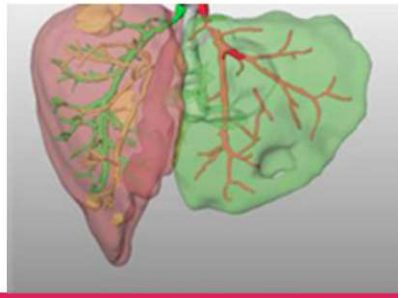


Table 2 Oncological results

	Oncological diagnosis	Disease-free survival or time to recurrence (months)	Site of recurrence	Current state
Case 1	MCRC	6	Lungs	Dead of disease after 2 years
Case 2	MCRC	26	No recurrence	Alive without disease
Case 3	iCCC	6	Lungs	Alive with disease after 25 months
Case 4	MCRC	9	Lungs (resected)	Alive without disease after 19 months
Case 5	MCRC	14	No recurrence	Alive without disease
Case 6	MCRC	6	Liver	Alive with disease after 12 months
Case 7	MCRC	6	Liver	Alive with disease after 7 months

- 0 % Mortalidade

Herman P, et al. J Gastrointest Cancer. 2015



J Gastrointest Canc
DOI 10.1007/s12029-015-9691-6

MGMT. OF COMPLEX CASES IN GI ONCOLOGY

High Mortality Rates After ALPPS: the Devil Is the Indication

Paulo Herman · Jaime Arthur Pirola Krüger · Marcos Vinícius Perini · Fabrício Ferreira Coelho · Ivan Cecconello

Herman P, et al. J Gastrointest Canc 2015

CB-IHPBA 2017

VIII CONGRESSO BRASILEIRO DE CIRURGIA DO FÍGADO, PÂNCREAS E VIAS BILIARES

7 a 9 de setembro de 2017
Centro de Eventos do
Hotel Plaza São Rafael
Porto Alegre - RS

Obrigado!