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Management of PVT during liver transplantation

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Outline

- General principles
- Technical options
- Expected outcomes

Portal/hepatic artery blood flows predict the level of ischemia-reperfusion injury

Predictor	Covariate-Adjusted Slope (95% Confidence Interval)[†]	*P* Value
PVF (mL/minute)	−0.256 (−0.488 to −0.024)	0.013
PVF (mL/minute/100 g)	−0.344 (−0.556 to −0.132)	0.019
HAF (mL/minute)	−0.181 (−0.357 to −0.006)	0.036
HAF (mL/minute/100 g)	−0.243 (−0.409 to −0.076)	0.044

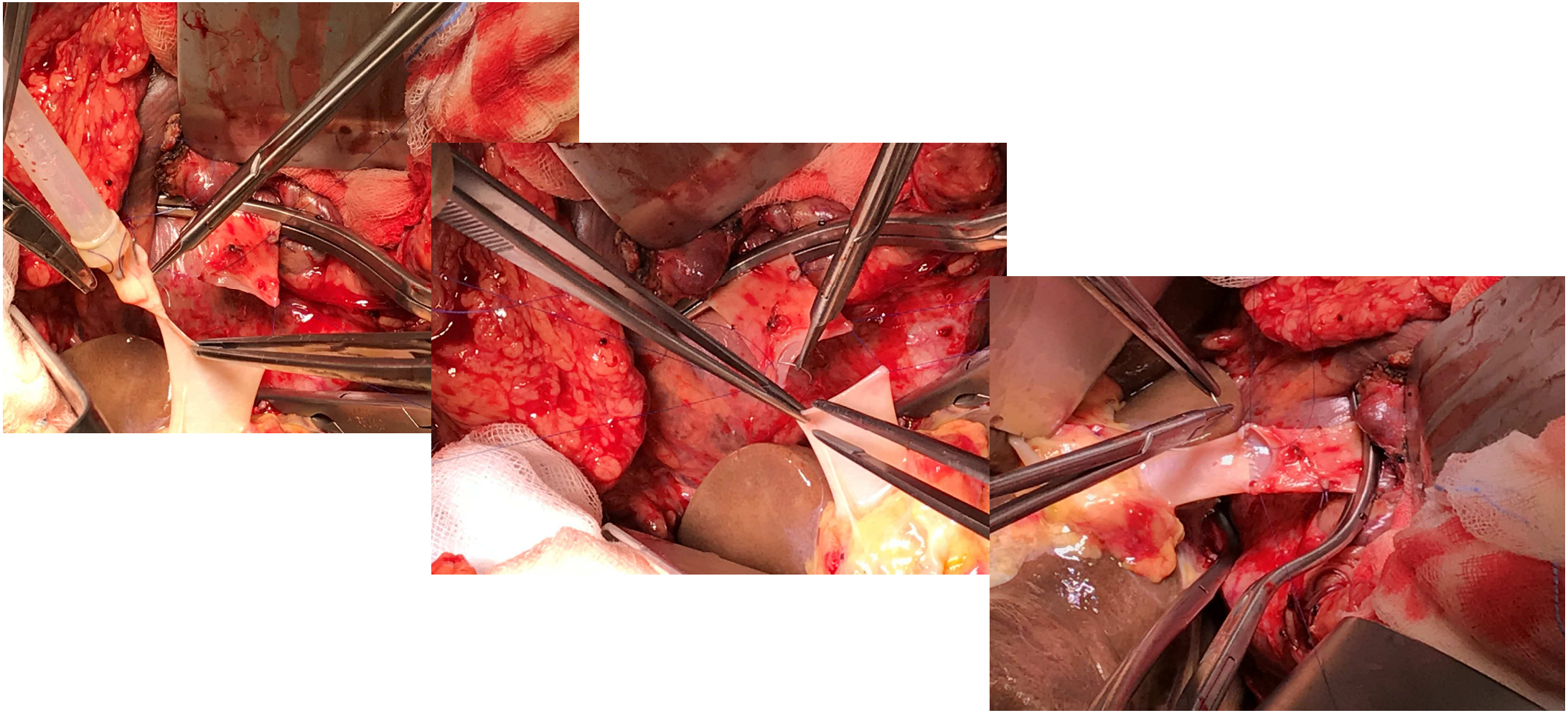
Kelly et al. Liver Transplantation 2011

Intra-operative portal/hepatic artery ultrasound abnormalities predict the risk of post-transplant thrombosis

- hepatic artery resistive index (RI) < 6
- systolic acceleration time (SAT) >0.08 seconds
- peak systolic velocity (PSV) > 200 cm/s on doppler ultrasound

Okek et al. Cureus 2022

Perfect technique for good flow and physiological anatomy



Thank you to W. Polak for the pictures

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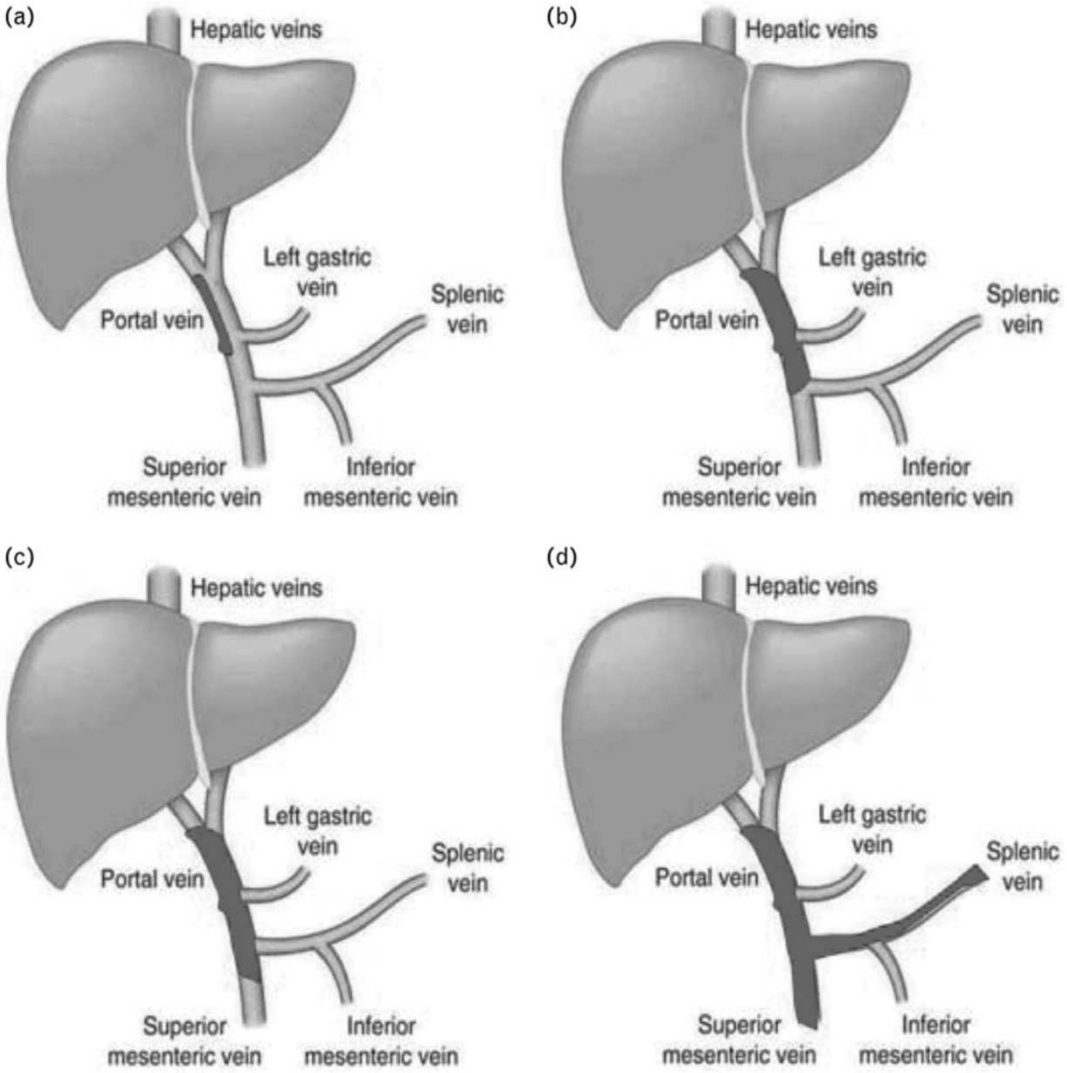
Portal vein thrombosis



Bhangui et al. J Hepatol 2019
Yerdel et al. Transplantation 2000