

Punch Biopsy and Muscle Plug Closure

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Goals of a 'good' biopsy method

- Quantity
- Safety
- Reliability
- Training
- Cost

Which?



Which?

Quantity: Variable

Safety: Variable

Reliability: Poor

Training: Difficult

Cost: None



Which?

Quantity: **Low**

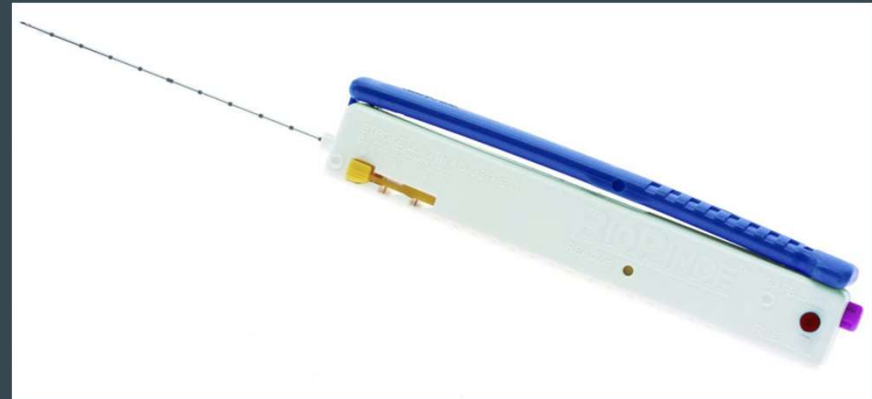
Safety: **Poor**

Reliability: **Poor**

Reproducibility: **Moderate**

Training: **Moderate**

Cost: **Moderate**



Which?



Quantity: Good

Safety: Good

Reliability: High

Reproducibility: High

Training: Easy

Cost: Low

We are not alone!

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The cutting (w)edge—comparative evaluation of renal baseline biopsies obtained by two different methods

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Table 1. Characteristics of patients and PTDB specimens

	Punch	Wedge
Total number	147	114
Male/female (<i>n</i>)	107/42	81/33
Male/female (%)	72.4/28.6	71.1/28.9
Median age in years (range)	50.1 (5–78)	50.5 (4–78)
Donor-derived damage, <i>n</i> (%)	80 (54.4)	64 (56.1)
Inadequate biopsies, <i>n</i> (%)	17 (11.0)	39 (34)
Serious adverse events ^a , <i>n</i> (%)	0 (0)	0 (0)

^aConcerning biopsy location, requiring surgical revision.

We conclude that PTDB obtained by a skin punch device is more reliable for assessing donor-derived damage of transplanted kidneys. This procedure provides a safe method for avoiding bleeding complications due to their limited depth and simple post-biopsy management by sutural closure. The main advantage of the PB lies in the standardization of this method to circumvent inter- and intrapersonal variability concerning biopsy size. From the pathologist's and surgeon's point of view, we can recommend the implementation of this method for obtaining baseline biopsy samples of transplanted kidneys.

However, kidneys are very....vascular

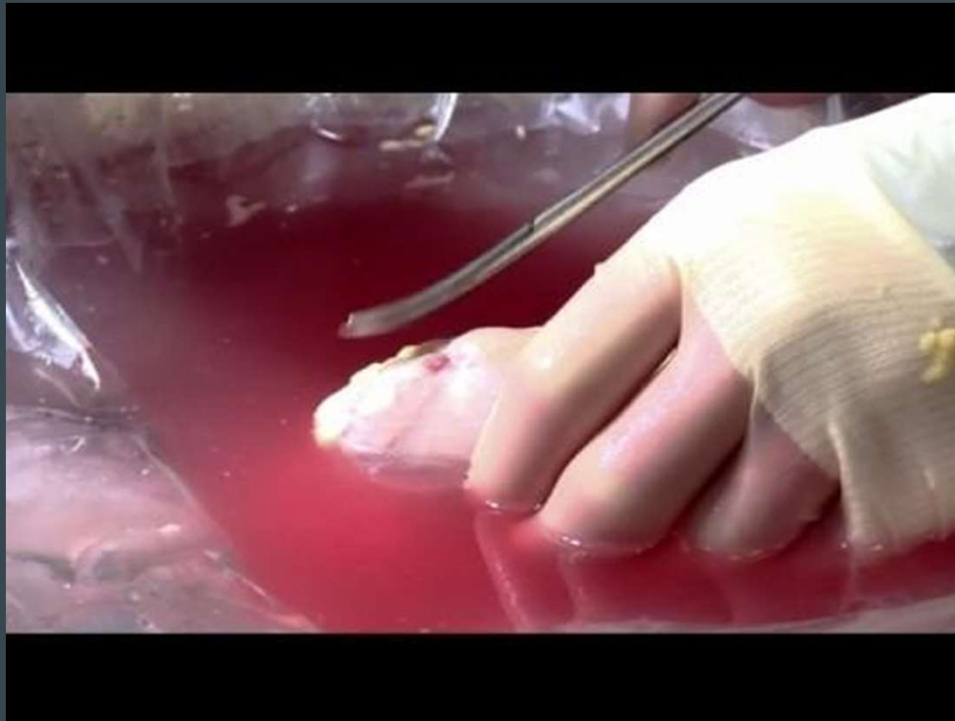
5



Complications

- 54 year old DCD donor, punch biopsy taken
- 7 days post transplant, post operative CT demonstrated a pseudoaneurysm and haematoma
- Required interventional radiology to coil and a unit of blood was given

The muscle plug



The finished product



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40x scans

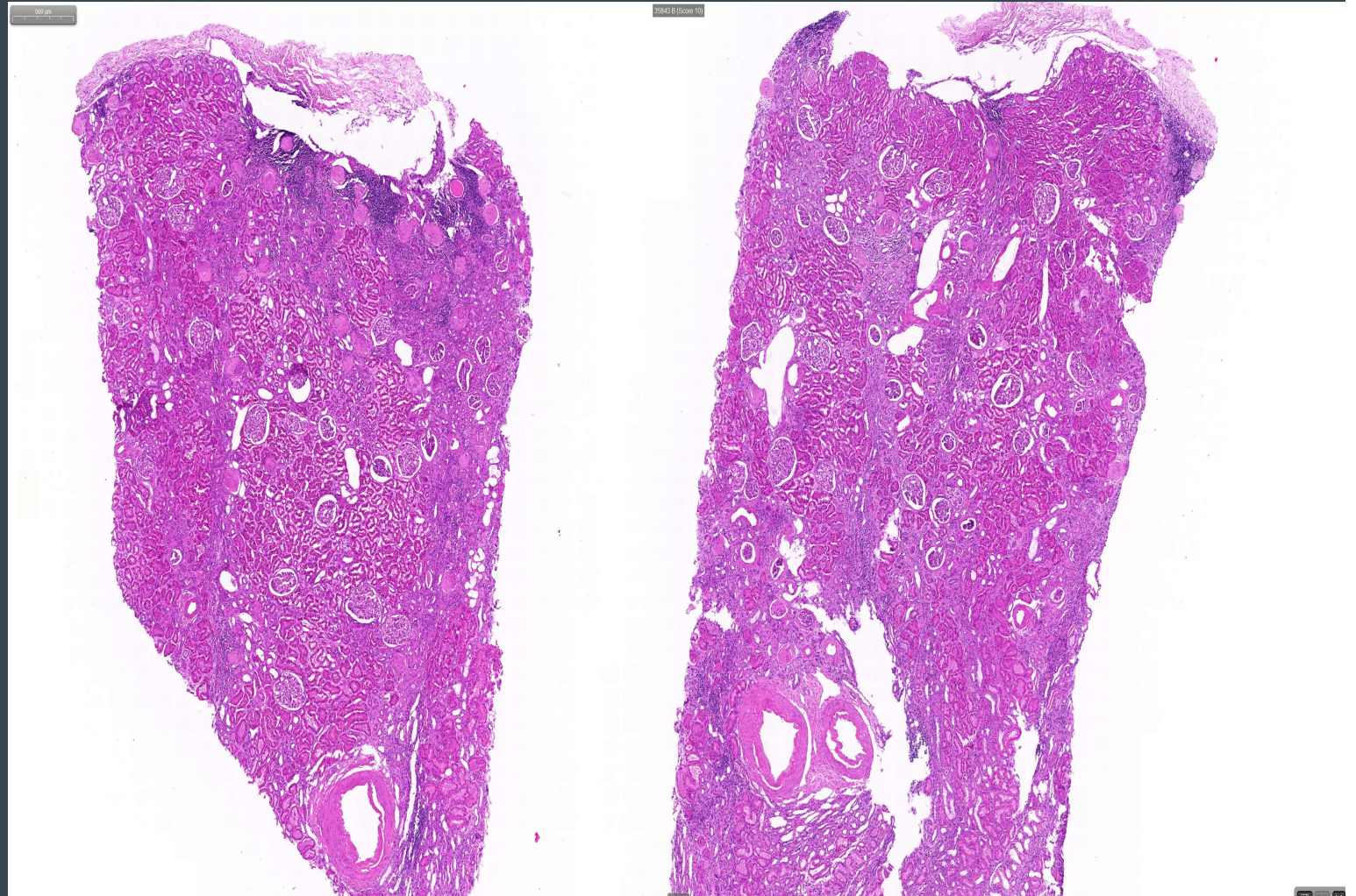
Root directory

- PITHIA Training <1>
- 40x scans <60>
- Tests <16>
- Sales

Description

Examinated	Examinated	Examinated	Examinated	Examinated	Examinated	Examinated
1 HE	1 PAS	10 HE	10 PAS	11 HE	11 PAS	12 HE
n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a
2017-10-02 09:15:33	2017-10-02 09:24:26	2017-10-02 12:27:28	2017-10-02 12:34:30	2017-10-02 12:41:22	2017-10-02 12:49:07	2017-10-02 12:56:46
1.96 GB	1.88 GB	1.33 GB	1.5 GB	1.72 GB	1.44 GB	655.4 MB
su	su	su	su	su	su	su

Slide view



Thank you!

QUOD – 50% of PITHIA biopsies taken so far have been in association with QUOD.