RCPath and Renal Registry Issues

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Renal Registry

- Renal database available for research
- Annual Report 2016 - due
- Acute Kidney Injury National Patient Safety Alert (AKI programme) – Think Kidneys website
- Rare kidney disease database (RareRenal.org)

Could not find specific mention of pathology in 40 pages...BUT

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- Director of Research Operations, KRUK
- Exploring ways to improve/capacity build renal pathology/ists for future
- Joint research fellowship with RCPath?

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- Do you want to develop your professional career to become an Academic Pathologist?
- What support and funding streams are currently available for trainee pathologists focusing on renal research?
- What funding gap/support prevents you developing your academic research interests?
- How could this be addressed?
- At what level would the fellowship be most advantageous/appropriate?
  - Pre or post FRCPath or PhD?
- How many academic pathologists do you know currently working in renal research? Diagnostic pathology?

Survey of EM services (UK)

- Questionnaire to EQA circulation list
- 127- list total
- 22 responses to cover 21 units UK plus Canada and include data on ~27 pathologists
- Establishment, number of cases and whether EM available
- How to choose and handle samples for EM

The Royal College of Pathologists
Pathology: the science behind the cure

Tissue pathway for medical renal biopsies

May 2013

Authors: Professor Ian Roberts, Professor Peter Furness, Professor Terry Cook

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Document name	Tissue pathway for medical renal biopsies
Version number	2
Written by	Professor Ian Roberts, Professor Peter Furness and Professor Terry Cook on behalf of the College's Specialty Advisory Committee on Cellular

In addition to routine light microscopy, there must be access to immunohistology (immunofluorescence and/or immunoperoxidase techniques) and electron microscopy. Electron microscopy is especially important in biopsies from paediatric patients. Electron microscopy facilities may be offsite. Laboratories handling renal biopsies should participate in the National EQA Scheme for renal stains, and the UK National External Quality Assurance Scheme for immunocytochemistry.

5 Further investigations

The light microscopy, immunohistology and electron microscopy from a single case should all be reported by the same pathologist. Reporting each in isolation may result in serious misdiagnosis.

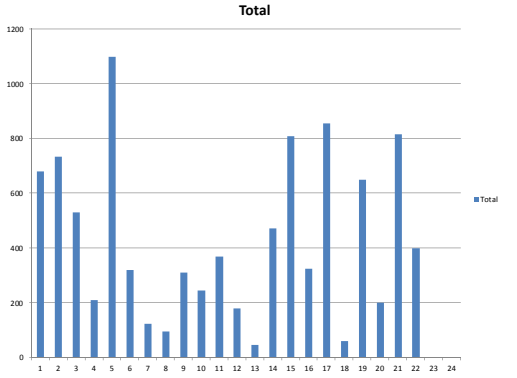
5.1 Electron microscopy (EM)

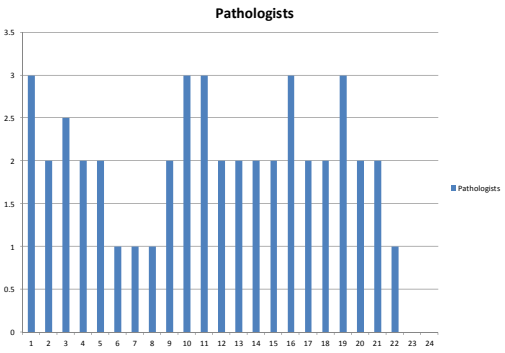
The need for EM should be assessed on the light microscopic appearances, but the majority of biopsies with suspected glomerular disease are investigated in this way *[Level of evidence D]*.[4] If EM is required, this should be available within two weeks.

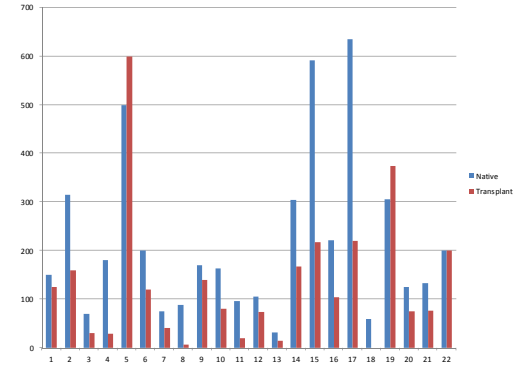
Renal transplant biopsies

This depends on the clinical context of the biopsy. Immunohistology for C4d (antibody mediated rejection)[5] and SV40 T Ag (polyoma virus infection)[7] should be available for all biopsies if required *[Level of evidence B]*.

Detection of peritubular C4d is less sensitive using IP methods on paraffin sections than IF on frozen sections.[6] The native renal biopsy immunohistology panel and electron microscopy are used for transplant biopsies when there is a possibility of recurrent or *de novo* glomerulonephritis.







EM taken (N)	EM taken (T)	EM reported (N)	EM reported (T)	Local
All	All	All	All	Yes
All	Selected	All	Selected	Yes
All	All	Selected	Selected	Yes
All	All	All	All	Yes
All	All	All	Selected	Yes
Selected	Selected	Selected	Selected	Yes
All	All	All	All	Yes
All	All	All	All	No
All	Selected	Selected	Selected	Yes
All	Selected	Selected	Selected	No
All	All	All	All	No
All	Selected	Selected	Selected	No
All	Selected	All	Selected	No
All	Selected	'Rarely'	NA	No
All	Selected	Selected	Selected	Yes
All	Selected	Selected	Selected	Yes
All	Selected	Selected	Selected	Yes
All	All	All	Selected	No
All	All	Selected	Selected	Yes
All	Selected	Selected	Selected	Yes
All	All	Selected	Selected	Yes
All	All	Selected	Selected	Yes

Where if not on site?	Fixative	Perform EM yourself?
	Glut	No
	Glut	No
	Glut	No
	Glut	No
	Glut	No
	Glut	No
	Glut	No
Cardiff	Glut	No
	Glut	No
Southampton	Formalin	No
Cardiff	Formalin	No
Leicester	Glut	No
Glasgow	Glut	NA
Leicester	Glut	No
	Form/Millonigs (isotonic buffer)	No
	Glut	No
	-	No
Cardiff	Glut	No
	Glut	Rarely
	Glut	No
	Glut	No
	Glut	Yes

Who?	How?	TATs	Report/feedback
Band 8 Clin Scientist	Screen	7 d to sev months	Combination
BMS 8b	Screen	17days	Comb
BMS 6 and 7	Screen	1-13d	Comb
BMS 7 and 8b	Printed	7d	Comb
Consultant Clin Scientist	Screen	1-7d	Comb
BMS 8	Printed	6-8w	Supp
BMS 6	Screen	1-3w	Comb
NA	Screen	14d	Supp
Senior BMS	Screen	5-7d	Original
PhD/BMS	Screen	4-5w	Comb
BMS 6 and 7	Screen	7-14d	Supp
Senior BMS	Printed	2w to 1 month	Comb
NA	NA	NA	Supp
Senior BMS	Screen	1w-3w	Original
BMS	printed and screen	1-2w	Comb
Senior BMS	Screen	2w	Comb
Senior BMS	p	7-10d	Comb
Scientist	Screen	2w	Comb
EM technician	Screen	1w	Original or supplementary
Band 6 or 7	Screen	few days to several months	Comb
BMS7 and 8a	Screen	5d to 2w	Comb
NA	NA	3d	Original

For others?	Plans/other
Yes	No
Yes	No
Yes	No
No	No but could offer to others
No	No but concerns over retirement
No	No
No	No
No	Revert to previous
Yes	Yes, develop as service for others
No	No
No	No
No	No
No	No
NA	No
Yes	Yes, EM at Southampton and reported locally
Yes	No but wish to expand service
Yes	Yes off site
No	No
Yes	No
No	No but local University offers competing service
Yes	No
Yes	No

Summary

- EM taken for both native/transplant
- Most have local service - scientist does microscopy and provides opinion/report
- Reported by Pathologist on images (virtual/photos)
- Turn around variable majority </=2/52; does not seem to rely on local/off-site
- Some units taking on service
- Some concerns over future