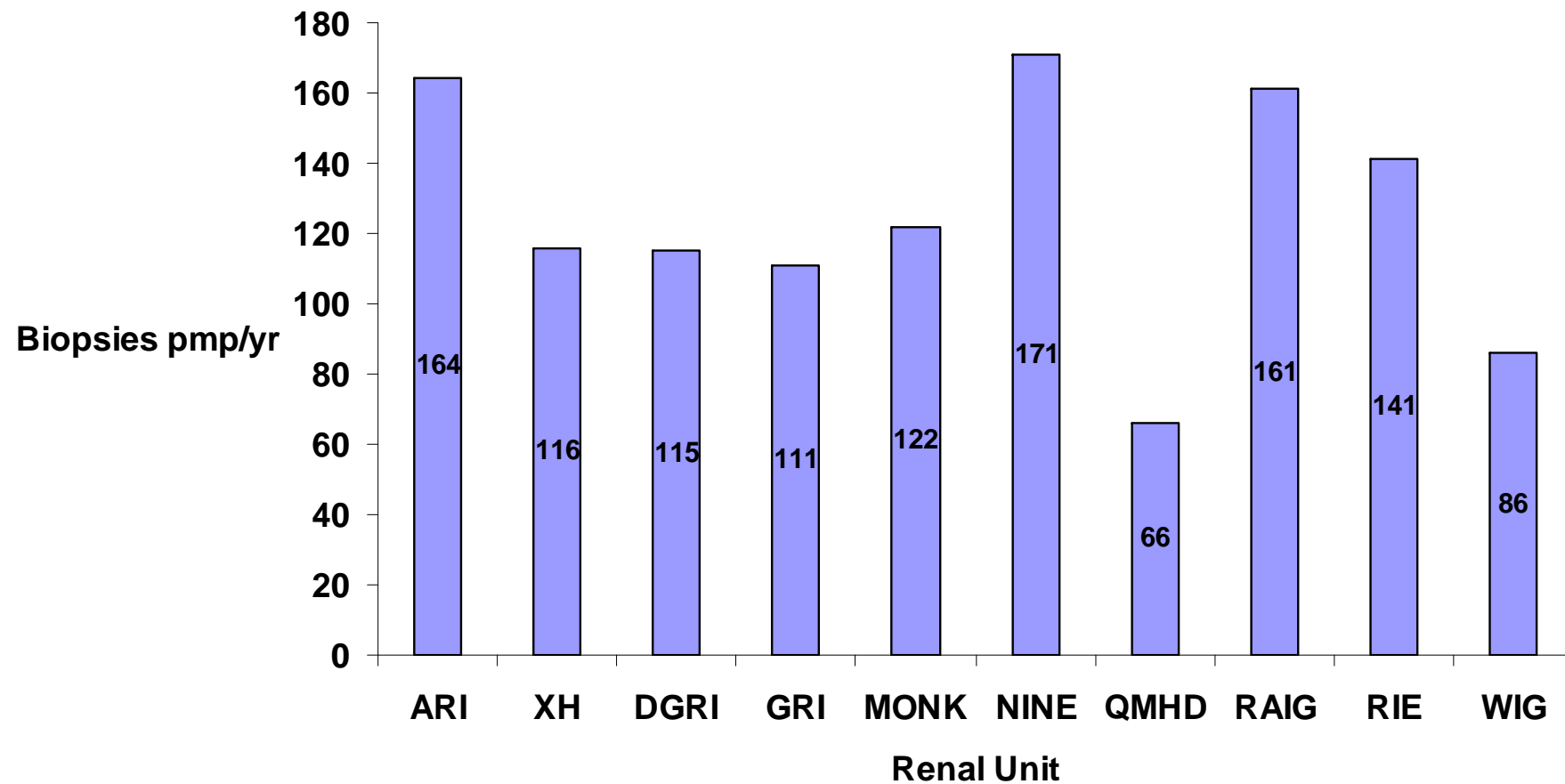


# Native renal biopsy in Scotland – Is practice uniform?

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Scottish Renal Biopsy Registry

# Incidence of native renal biopsy in Scotland 2002-2006



# Background

- Common routine procedure
- No formal guidelines exist to guide practice
- Recent advances have improved safety
- Invasive procedure - Most common complication is bleeding

# Minimising bleeding risk

## General consensus

- Avoidance of biopsy in patients with uncontrolled hypertension or untreated coagulopathy
- Assessing platelet count and clotting times
- Real time ultrasound guidance

## Controversy

- Bleeding times
- Administration of pro-coagulants
- Antiplatelets and non-steroidal treatments
- Duration of bed rest

# Glasgow Experience

- Acute and elective patients 7y period
- 2% major complications
- 18% minor complications
- No differences in complications relating to age, renal function or gender
- Complications more common in emergency patients
- No difference in major complications in patients continuing to take antiplatelets
- No difference in complications compared with series where BT checked and corrected

# Scottish Experience

- All 10 renal units audited
- Questionnaire
- Completed in January 2009

# Results

- Operator:
  - Nephrologist alone: 4 units
  - Nephrologist or radiologist: 2 units
  - Nephrologist and radiologist: 1 unit
  - Radiologist alone: 3 units
- Method:
  - All units use real time ultrasound guidance

# Results

- Duration of stay:
  - 4 units perform day case
  - 4 units require overnight stay
  - 2 units require a 48h stay
- Detection of complications:
  - All check Hb post biopsy unless day case
  - No units routinely perform post-biopsy ultrasound



# Bleeding risk

- Antiplatelets
  - 8 units discontinue antiplatelets before elective biopsy
  - 1 unit discontinues only clopidogrel
  - 1 unit has no fixed policy
- Bleeding time
  - Not routinely checked in any unit
- Procoagulants
  - Administered empirically in 2 units if patient has significant renal impairment

# Conclusions

- Consensus regarding imaging and detection of complications
- Differences in:
  - Operator
  - Duration of stay for elective cases
  - Steps taken to minimise bleeding complications
- Plan to extend to the whole UK

# BTS lung biopsy recommendations

Preoperative investigations: coagulation indices

- Prothrombin time (PT), activated partial thromboplastin time (APTT), and platelet count should be checked before percutaneous lung biopsy. [C]
- Oral anticoagulants should be stopped before a percutaneous lung biopsy in accordance with the published guidelines on perioperative anticoagulation. [C] Antiplatelets should continue

Relative contraindications include:

- Platelet count  $< 100\,000/\text{ml}$
- APPT ratio or PT ratio  $> 1.4$

In these situations a decision to proceed to biopsy should be made following discussion with a haematologist. [C]

- Patients with uraemia should have DDAVP