

Year 4

perspectives on procedures

Curriculum Day 2010

Some initial thoughts

- Definitions ?
 - Clinical skills
 - Technical skills
 - Practical procedures
- Timing – learning, forgetting, re-learning
- Technicians versus Clinicians

Overview

1. What procedures are specifically taught to Y4 students during the module?
2. What procedures are assessed during your module?
3. What procedures do you think an intern should be able to perform in your discipline?

(On Day 1) Intern must be able to perform

http://facs.med.cuhk.edu.hk/slo/slo_pp.html

- Children's Health
 - Assessment of dehydration ? Clinical skill
 - Measurements for milestone development ? Clinical skill
- Obstetrics & Gynaecology
 - Assisting Delivery
 - Assisting in Gynaecological & Obstetric Procedures – including episiotomy
 - Vaginal Examination with a speculum
 - Vaginal Swab
 - Pap Smear /Cytology
 - Fetal Heart Monitoring
- Community Family Medicine
 - nil
- Psychiatry
 - nil

Clinical skills lab list

- Consent and Documentation
- Universal Precautions and Infection Control
- Oxygen therapy
- Nasogastric tube insertion
- Urinary Catheterisation
- Local Anaesthesia: infiltration
- Sedation
- Blood-Taking for blood Cultures
- Blood taking for multiple samples
- Cross matching
- Recording a 12 lead ECG
- Spirometry/Peak flow rate
- Blood glucose test by strips
- Urinalysis by test strips and microscopy
- Lumbar Puncture
- Tuberculin test
- Intramuscular injection of vaccines and antibiotics
- Subcutaneous injection of insulin
- Intravenous Cannulation
- Monitoring central venous pressure
- Suturing
- First aid for bleeding and fracture
- Wound dressing
- Basic life support
- Certifying death
- Arterial blood sampling for ABG
- Blood taking from Hickman/central line
- Pleural tapping
- Drainage of ascites
- Joint Aspiration

Technical Skills in Paediatrics

“The undergraduate is not expected to master the technical skills of management such as venipuncture, lumbar puncture, injections, suprapubic puncture etc during the paediatric module”

Paediatric Y4

Skills (taught) and assessed during module

1. Blood glucose
2. Urine multistix
3. BP by sphygmomanometer
4. Respiratory drugs and devices
 - Metered dose inhalers via aerochamber or volumatic; turbuhalers; peak flow meters

On Day 1 Paediatric interns should
be able to perform:

“ we don't expect interns to be able to
perform many (if any) practical procedures
on their first day ”

Basic skills that paediatric interns expected to acquire quickly

1. Venous blood sampling (including blood culture, x-match) *
2. Capillary blood sampling
3. Blood sampling from central lines *
4. Venous catheter insertion
5. POCT analyses: blood gas, glucose, serum bilirubin, haematocrit
6. Lumbar puncture *
7. Bladder catheterisation *
8. Urine microscopy
9. 12-lead ECG
10. Cardiac compressions

* need to be familiar with the aseptic technique and cross-match procedure.

For all procedures, hand hygiene and infection control protocols should be strictly observed.

Skills paediatric interns are usually NOT expected to perform include

1. Arterial blood sampling
2. Arterial catheter insertion
3. Central venous catheter insertion
4. Umbilical vessel catheterisation
5. Intubation
6. Scalp vein catheter insertion
7. Suprapubic catheterisation
8. Bone marrow aspiration
9. Intrathecal injections

O&G Y4

- Speculum examination & taking of pap smear are taught in Y4
- Speculum examination is assessed

On Day 1 O&G interns should be able to perform:

1. Speculum examination
2. Taking pap smear
3. Taking vaginal swab

Basic skills that O&G interns expected to acquire within 1-2w

1. Perform Actim PROM test for rupture of membranes
2. Artificial rupture of membranes
3. Episiotomy repair
4. Amnioinfusion in labour

CFM Y4

- Community medicine – no procedures & no intern attachment
- Family medicine – measurements of BP, temp, BMI in Y4. May observe ear syringing, ECG measurement, wound swab & pap smear (but would not be assessed).

On Day 1 CFM interns should be able to perform (now only pilot):

- Nil ?
- Expected to learn suturing & simple aspirations (abscesses & ganglions) during internship

Psychiatry Y4

- Take a psychiatric history and perform mental state examination ~ taught & assessed

On Day 1 Psychiatric interns should be able to perform:

1. draw venous blood
2. give intravenous injections
3. set up venous access

Some final thoughts

- Calls for students to be taught & assessed on “procedures” arise when potentially life-threatening errors occur during internship (e.g. x-match)
- Teaching skills that are site, equipment specific should only be taught (& assessed) when needed
- Many simple technical skills are probably better done by full-time technicians rather than clinicians
- Complex procedures better done by experts rather than interns

Conclusion

- Do not teach undergraduates technical skills that are site/equipment specific
- Improve apprenticeship & assessment of technical skills required during internship
- Do not use interns as technicians
- Decide which procedures/skills are not appropriate to be performed by interns

Thank you