DCH / IPPC
Diploma in Child Health / International Postgraduate Paediatric Certificate
The Future of General Practice 16
Concepts in Paediatrics

• What is different in paediatrics (apart from ‘children are not little adults’)
• Primary care cases across a range of ages
• Spot diagnoses.....test yourself
• Where you can find reliable help
GPs: for Children & Young People

• Backbone of paediatric care
• Pre-conceptual care → adulthood
• Enormous potential to improve the health & wellbeing of children & young people, individually and a population level
• Knowledge of family & circumstances
• Utterly committed to communities
• How to do keep giving the BEST care?
What’s special in paediatrics?

• Limited information from actual patients; requires special interpretation; always listen to parents
• 85% diagnosis from focused history
• Congenital problems, genetic disorders & syndromal associations require consideration
• Approach to examination & normal parameters vary with age; growth & measurements essential
• Engagement & communication focused on patient & family
## Normal Values

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Pulse</th>
<th>BP</th>
<th>RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature</td>
<td>120-170 *</td>
<td>55-75/35-45†</td>
<td>40-70†</td>
</tr>
<tr>
<td>0-3 mo</td>
<td>100-150 *</td>
<td>65-85/45-55</td>
<td>35-55</td>
</tr>
<tr>
<td>3-6 mo</td>
<td>90-120</td>
<td>70-90/50-65</td>
<td>30-45</td>
</tr>
<tr>
<td>6-12 mo</td>
<td>80-120</td>
<td>80-100/55-65</td>
<td>25-40</td>
</tr>
<tr>
<td>1-3 yr</td>
<td>70-110</td>
<td>90-105/55-70</td>
<td>20-30</td>
</tr>
<tr>
<td>3-6 yr</td>
<td>65-110</td>
<td>95-110/60-75</td>
<td>20-25</td>
</tr>
<tr>
<td>6-12 yr</td>
<td>60-95</td>
<td>100-120/60/75</td>
<td>14/22</td>
</tr>
<tr>
<td>12 ≥ yr</td>
<td>55-85</td>
<td>110-135/65/85</td>
<td>12-18</td>
</tr>
</tbody>
</table>
3 day old infant

- Noted to have these lesions on scalp
- What is the diagnosis?
- What management is needed?
- And when?

- HSV 2: needs urgent Acyclovir as risk of disseminated disease
- Rare: vigilance required
- Potential for disseminated HSV
9 day infant boy with vomiting

- Vomiting several times for 24 hrs; not bile stained; not projectile; no blood
- Presented shocked with pulse of 65; no fever; no cough; no screaming
- Noted to have darker coloured skin than mother
- K+ high
  - Doctor had recently studied DCH / IPPC Webcast on Paediatric Endocrine Emergencies; knew of Congenital Adrenal Hyperplasia
  - Gave IV hydrocortisone and within 2 minutes pulse 135 & rapid recovery
- Incidence 1: 12,500 live Caucasian births
5/52 girl

- Cough for 3/52: ‘staccato’, not paroxysmal
- No fever; no coryza, no eye discharge
- No contacts with URTI
- Drinking adequately
- Mildly tachypnoeic; mild crackles on auscultation
- CXR some interstitial changes
  - Chlamydia pneumonia: 5-30% infected neonates will develop pneumonia; 50% with pneumonia have a h/o C. Trachomatis conjunctivitis
3/12 old girl not moving leg

- Mild coryza for 2-3 days; initial mild fever
- Overnight not moving R leg
- No h/o trauma; no fever now; no rashes
- Feeding well and alert
- Systemic examination normal
- Not able to move R hip

- Septic arthritis R hip; Organism isolated was *Neisseria meningitidis*
6/12 girl with abdominal distension

• Admitted for 2 days; initially diarrhoea with blood x4; 2 vomits; on IV fluids; voiding

• Increasing abdo distension; no vomiting; no stool; no crying / distress

• Clinically P 140; RR 28

• Distention; mild L tenderness; dull below umbilicus; hyper-resonant above; BS high pitched
6/12 girl with abdominal distension

- PR slight streak blood
- AXR distended loops & transudate
  - Missed intussusception and gangrenous gut
  - Excellent recover after laparotomy for reduction of intussusception and resection of gangrenous gut
  - Incidence 1.5-4 cases per 1000 births; M:F = 3:2
8 month boy with stridor

• 2 week history
• From VERY remote & resource poor location
• No coryza, no fever, no cough, no inhaled f/b
• Noted to have capillary haemangioma overlying mandible

• Diagnosis of supraglottic haemangioma most likely; NO RESOURCES TO TEST
• Because of IPPC, commenced Propranolol
• Within 2 days breathing markedly improved
15 month girl with ‘intractable thrush’

- Brought in by father & maternal grandmother
- Episodes of vulval itching over recent weeks
- Given topical antifungal preparations by GP
- Also treated with topical steroids
- Ongoing rubbing at times; otherwise well
  - Examination normal
  - Self-stimulating behaviour
  - Reassured that this is normal phenomenon (“We thought as much” said Grandmother)
2 year old with vomiting

• Sudden onset; 7 bright yellow vomits
• NO PAIN; well in between
• No fever / URTI / diarrhoea / rashes
• No contacts; previously well
• Examination normal
• S/b Surgeon because of yellow vomits; discharged home
2 yr old again

• Re-presented 5 days later: “screaming every night & inconsolable” – parents thought it was psychological disturbance from previous hospital visit. NO further vomiting

• Examination normal
  • U/S suggestive of abnormally located SMA vs SMV
  • Ba swallow suggestive of abnormal DJ flexure
  • Surgery for Malrotation with Volvulus
  • Incidence 1: 200-500 live births with symptomatic presentations 1:6000 (all patients with diaphragmatic hernia, gastroschisis & omphalocele have intestinal malrotation by definition & seen in 17% with duodenal atresia & 33% with jejunal atresia)
2 ½ year girl

- Diarrhoea for 18/12; no blood
- S/b Paediatrician & thought to be Toddler’s Diarrhoea
- Mother concerned re protuberant abdomen
- No vomiting / pain; eats normal diet
- No F/h Coeliac disease / IBD
2 ½ yr girl

- Wears diapers still
- Often miserable
- Examination: crossing centiles for weight; no pallor / bruising; no distress; marked abdominal distension; thin arms; gluteal wasting; skin normal
- On further questioning, she had a history of cough for 6/12
- CXR some streaky changes; Sputum grew *Pseudomonas aeruginosa*
- Sweat test positive: Delta F 508 (95%) –ve; another mutation
- Mother so grateful: told that this girl begged for more food each day & ate more than thriving twin
4 year old with acute L UQ pain

- Sudden onset of distress at preschool
- H/o recent URTI and cough; on oral Amoxicilllin
- No respiratory distress
- No vomiting / diarrhoea / rashes
- Appetite sl reduced; urine o/p normal
- Afebrile; P 122; RR 28 HS dual, pulses normal
- Crying during chest examination
4 yr old with acute L UQ pain

- Abdo XR
- LLL Pneumonia
5 year old with R upper thigh pain

• Hit leg on coffee table 6/52 earlier
• Now pain R upper lateral thigh & slight limp for 3 days; pain in day limiting activity & awakening from sleep
• Not as active; no fevers; no rashes
• General examination normal; limb examination normal: full range of joint movements; no local warmth / tenderness / redness
• But unable to bend & local tenderness lower lumbar spine
5 year old with R upper thigh pain

- XR narrow L4,5
- MRI: large mass c/w discitis
- Treated with IV antibiotics
- Outcome: dramatic improvement within 2-3 days
- Incidence 1:100,000-1:200,000 USA data
7 year girl with painful knee

- Hopped in smiling with history of pain overnight; no trauma; no other joint pain; otherwise well
- Past history of asthma; on prn Salbutamol
- F/h Atopy; fully immunised; developmentally normal
- What are the differential diagnoses?
7 year girl with knee pain

- No rashes / pallor / bruising / fever
- HS & pulses normal; chest clear
- Small lymph nodes in neck; mild splenomegaly
- Mild swelling around R KJ; ROM sl restricted; no erythema / warmth; no tenderness
  - XR wnl
  - FBC: Hb 105; WCC 35,000, Plats 402x 10^9
  - ESR 25
  - Blasts noted on film & ALL confirmed
10 year old girl with chest pain

- Episodic sharp pain, clutching chest; lasts a few seconds; unrelated to exertion; no history of heart problems; no dyspnoea
- History of not moving R arm for 3/12 the previous year; resolved spontaneously
- Growing normally; examination normal except for 3 cm spherical, clearly demarcated lesion overlying trachea
10 year old girl with chest pain

• Her mother commented that she was anxious & just didn’t wash there as scared that pressing over her trachea would stop her breathing........

• With gentle encouragement able to touch doctor’s trachea; then own; able then to wash mark off

• Cardiac examination normal; CXR  ECG normal
• Psychosocial problems: in between houses; living with abusive grandmother; busy parents oblivious to her anxiety
• Referred to community psychologist & GP for f/up
A 13 year old girl presented with increasing back pain over the preceding 2 months

> 2 kg weight loss

Loss of appetite

Decreased activity; pain interfered with activity; pain awoke her at night

Some urinary incontinence
Examination

- A thin girl: 44kg just < 50th centile; 160 cm 50-75th centile
- No pallor / bruising / fevers
- Normal temperature, pulse, respiratory rate and blood pressure
- Normal range of movement, normal straight leg raising
- No tenderness in back
- Neurologically normal
What is not yet told?

• What is missing from the history and examination?
Adolescent Assessment & Pubertal History

- Tanner stage 4 breast development and pubic hair
- No menarche
- No other past medical history
- HEADDS
Examination continued

• A large mass was palpated slightly to L in lower abdomen.
• U/S showed large collection within her uterus....and the diagnosis of haematocolpus and haematometra was made: > 800 ml blood in uterus. Normal ovaries
• Referred for urgent gynaecological assessment
Management

• Surgery recommended
• Significant cultural concerns expressed by parents
• Finally surgery agreed
• Excellent outcome & long term prognosis
Always examine genitalia in every neonate

• Important features of examination in EVERY female neonate & child
• If diagnosed as a child, advised to wait till adolescence for surgery as oestrogenisation may result in visibility of minimal perforation......with no need for surgery
• Surgery at puberty, before menarche, avoids scarring that is more likely in prepubertal females when oestrogen levels are low
Incidence

• Very rarely familial From incomplete development as embryo

• Incidence 1/1000 to 1/10000; recent population based study suggested 1 in 2000

• Usually is an isolated hymenal anomaly, hormonal and endocrine function is normal....
MUST consider imperforate hymen

• Typical presenting complaint may be amenorrhoea. When some do not regard amenorrhoea as pathological until 16 years....

• Failure to menstruate beyond 2-3 yrs from onset of breast development, thelarche, is statistically very uncommon & must be investigated; imperforate hymen is uncommon but important cause.

• Often the diagnosis is not even considered .....resulting in marked delay in treatment
Differential Diagnosis

• In young girls, acquired labial adhesions may be confused with absence of vagina
• Consider FGM in an adopted child
• DD for cystic mass at hymen: ectopic ureter, hymenal cyst; hymenal skin tag; periurethral cyst; vaginal cyst
• Vaginal agenesis: Mayer-Rokitansky-Kuster-Hauser syndrome
• Must differentiate abdominal mass from sacrococcygeal teratoma, ovarian tumour, mesenteric cysts
Treatment

- Surgery is a medical necessity
- Cultural view should not preclude performance of medically appropriate surgery
- May also recommend laparoscopy because of potential for pelvic adhesions
If untreated......mortality

- DCH / IPPC Health Inequity Case Report: travesty of
- Young adolescent whose parents refused surgery
- Lost to follow-up
- Died of acute sepsis
- VERY simple surgical intervention would have saved her from an agonising and unnecessary death
The ‘Adolescent from Hell’

• An utterly impressive smart, competent, personable, thoughtful, humorous young doctor: “what do I do with her, she just sits there & says NOTHING; she’s had her appendix out 6/52 ago & has ongoing pain but won’t talk”

• Could not spend much time; in midst of assessing sick child. Gave information. Told him “you are the best communicator I’ve seen…..go do it!”
What transpired

• Read a summary of “how to engage adolescents”.....
• Explained to her parents the importance of her emerging autonomy. Spoke to her alone, then to parents with her permission
• Explained confidentiality & its boundaries
• HEADDSS.....
• Strengthened through guidance....Dr M continued the long discussion that followed
The outcome

• Note next day: “I followed advice to the letter; I think I could become quite good at this. She is seriously depressed & self-harming. Have referred her for prompt help. She felt heard……”

• Or as one 13 yr old said: “how do you know to ask me all those questions?” as she disclosed distress, self-harm & significant depressive illness
What helps? Knowledge based:

• Detailed approach to history (85%)
• Thorough physical examination: measurement, centiles, review, observation at a distance
• Discipline of writing ‘DD’
• What is normal; patterns of illnesses at different ages; growth; development; nutrition; immunisation; how to promote a nurturing environment
• Compassionate communication
Special considerations

Quirky things that children just have, or do:

- Miliaria, Epstein pearls, tourniquet, smegma deposits; neonatal teeth.....& so much more
- Inhaled (or inserted) foreign bodies & their complications (“cough with a whistle”)  
- Ingestions: accidental or intentional 
- Manifestations of anxiety
- Learning & developmental problems
- Adolescent health & mental health problems.....& substance concerns
Learning energises US!

• And now some ‘spot diagnoses’: 
7 year old boy: sudden onset of fever & purple rash. Presented 6 hours later. No radial pulse by the time he walked from Hospital entrance to ED. Given 3 boluses of N/ Saline; on Dobutamine. Commenced on IV Cefotaxime after blood tests. Monitored in very basic ICU.
A simple approach in Paediatric Dermatology:
1. Describe lesion
2. Pattern over time / course of illness
3. Location
4. Symptoms of itch / pain / fever
5. Associated coryza; lymphadenopathy; joint pain
Incidence 1: 15,000 approx.; may be familial; may be bilateral; usually presents with leucocoria
2 year old boy with itchy eyes

Phthiriasis palpebrarum (*Phthirus pubis*)
Traditional medicine
Paediatric education essential for:

• Empowering us to enable better health outcomes for children & young people

• Boosting our confidence; fulfilment of ‘our raison d’etre’: to make a real difference for each child

• Keeping up with the ever expanding mushroom cloud of evidence based new knowledge, its interpretation & utilisation (incidence of ALL in children↓ by 19% if breast fed for 6/12)

• Managing the ‘shades of grey’ that are part of every day practice, especially assessing sick kids
The Diploma in Child Health

Vision:
Healthier children globally

Mission:
To empower healthcare professionals treating children and young people globally with best practice in paediatric care.
The Diploma in Child Health / International Postgraduate Paediatric Certificate is awarded in conjunction with the Sydney Children’s Hospitals Network and the Sydney Medical School of the University of Sydney.

DCH is awarded in association with:
- Princess Margaret Hospital, Perth, for WA
- Women’s and Children’s Hospital, Adelaide, for SA
- Children’s Health Queensland, Brisbane for Queensland

IPPC is co-awarded with:
- India: Maharashtra University of Health Sciences; Apollo Hospital Group; IMA CGP
- Africa: Adventist University of Africa
DCH / IPPC / IPPNC: History

- 1992-2016.......Now in its 25\textsuperscript{th} year: Alumni 6132
- DCH commenced in 1992 at Royal Alexandra Hospital for Children & expanded throughout Australia since 1998.
- International program from Hong Kong in 2005 to:
  - SE Asia
  - S Pacific
  - Subcontinent
  - Africa
Energized by Education to:

• Know the likely diagnosis (& differentials)
• Implement timely evidence based most appropriate management
• Meticulous observation & monitoring
• Clear empathetic communication
DCH Covers

- Competence in common problems
- Recognition of atypical presentations of common problems
- Paediatric red flags
- Early detection of serious problems:
  - acute illness before deterioration critical;
  - developmental problems early intervention
- BEST possible care for every child, young person & their families......wherever they are.
DCH / IPPC Essentials

• 1 year part time; 8 hour per week
• 112 Webcasts updated annually: case based teaching. (Webcast = recorded lecture, learning outcomes, notes & self-assessment questions)
• All subspecialty areas from neonates to adolescents - ALL from subject matter experts
• Webinars
• Questions to Presenters
DCH / IPPC Essentials

• 2 Streams: Jan – Dec; Sept – Aug
• Online for widespread access: DVD backup
• **Assessment:** Case Reports; Oral & Written Examination **conducted in each country**
• Paediatric clinical experience required
• Self-sustaining education enterprise
• **Not for profit:** full international fee in 2016 AUD$6350. Fees for GP Registrars $3000, GPs and other doctors $3550; RMOs LCCH $1500
DCH / IPPC: what matters

- **Participant Handbook**
- **Additional Resources on website:** “Paediatric Prescribing”; online journals; Fact Sheets facilitate communication with parents
- **Webinars**
- **Email questions** to Webcast Presenters
- **Newsletters:** instructive cases; Q & A; current notes: breast feeding for more than 6 months is associated with a 19% reduction in the risk of childhood leukaemia
- **Assessment:** conducted in each country:
  - Case reports: Medical & Health Inequity
  - Written Examination: MCQ
  - Oral Assessment Task; (pre-2015, Oral Examination (as standardised, structured viva)
Accelerating achievement of Sustainable Development Goals

Training 1 doctor with DCH / IPPC who treats 20 children per day ➞ improved quality in 5,000 child health consultations / year

- The Doctor
- Children & Young People
- Parents, especially Mothers
- Families & Communities
- Colleagues & Students
National Recognition of DCH

- Royal Australian College of General Practitioners recognise DCH as a parallel pathway to fulfilling the paediatric curriculum requirements for General Practice training

- Australian College of Remote and Rural Medicine recommend DCH for Advanced Skills Training in Paediatrics
International Recognition of DCH / IPPC

- DCH / IPPC is now formally recognised by the:
  - Hong Kong Medical Council
  - Singapore Medical Council
  - Kenya Medical Practitioners and Dentists Board
  - Zimbabwe Medical Council
  - Vietnam Paediatric Association
DCH / IPPC Developments

• Webcasts can be viewed on ANY device, phone, tablet, PC, laptop anywhere there is internet connectivity at any time
• Audio files downloadable for revision
• Ongoing free lifelong access to annually updated webcasts for our Alumni
DCH FEEDBACK

• Current Participant Feedback 2015
• Dr Maria Li 2010 First in course:
  – Best tax deductible $ spent on my education in my life
  – Previously scared of seeing sick children: ‘some weird alien species’; now **empowered** & always seek the opportunity to care for children & young people
• Dr Andrew McDonald: “every child in Western Sydney deserves a GP with a DCH”.....
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>22.50</td>
<td>4.43</td>
<td>4</td>
<td>3.273</td>
<td>10.648</td>
</tr>
<tr>
<td>China</td>
<td>1,355.70</td>
<td>14.79</td>
<td>13</td>
<td>1.456</td>
<td>1.512</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2.95</td>
<td>23.15</td>
<td>32</td>
<td>2.763</td>
<td>3.499</td>
</tr>
<tr>
<td>Vietnam</td>
<td>93.40</td>
<td>18.99</td>
<td>24</td>
<td>1.159</td>
<td>1.137</td>
</tr>
<tr>
<td>Cambodia</td>
<td>15.50</td>
<td>51.36</td>
<td>38</td>
<td>1.224</td>
<td>1.006</td>
</tr>
<tr>
<td>India</td>
<td>123.60</td>
<td>43.19</td>
<td>53</td>
<td>0.743</td>
<td>1.711</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>16.60</td>
<td>45.67</td>
<td>41</td>
<td>0.356</td>
<td>0.218</td>
</tr>
<tr>
<td>Solomon Isl</td>
<td>0.61</td>
<td>16.17</td>
<td>30</td>
<td>0.224 **</td>
<td>2.053</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>0.27</td>
<td>16.41</td>
<td>17</td>
<td>0.116 **</td>
<td>1.696</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.11</td>
<td>12.36</td>
<td>12</td>
<td>2.381</td>
<td>11.974</td>
</tr>
<tr>
<td>Myanmar</td>
<td>55.70</td>
<td>44.91</td>
<td>51</td>
<td>0.612</td>
<td>1.003</td>
</tr>
<tr>
<td>Seychelles</td>
<td>0.92</td>
<td>10.77</td>
<td>14</td>
<td>0.563 (2004)</td>
<td>2.932 (2004)</td>
</tr>
<tr>
<td>Kenya</td>
<td>45.01</td>
<td>40.71</td>
<td>71</td>
<td>0.181</td>
<td>0.792</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>98.60</td>
<td>55.77</td>
<td>64</td>
<td>0.025 (2009) **</td>
<td>0.253 (2009) **</td>
</tr>
<tr>
<td>Malawi</td>
<td>17.38</td>
<td>48.01</td>
<td>68</td>
<td>0.019 **</td>
<td>0.283 **</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>13.70</td>
<td>26.55</td>
<td>89</td>
<td>0.062 **</td>
<td>1.251</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>5.74</td>
<td>73.29</td>
<td>181</td>
<td>0.022 **</td>
<td>0.166 **</td>
</tr>
<tr>
<td>Rwanda</td>
<td>12.30</td>
<td>59.59</td>
<td>52</td>
<td>0.56</td>
<td>0.689</td>
</tr>
<tr>
<td>Namibia</td>
<td>2.20</td>
<td>45.64</td>
<td>50</td>
<td>0.374</td>
<td>2.775</td>
</tr>
<tr>
<td>Kenya</td>
<td>45.00</td>
<td>40.71</td>
<td>71</td>
<td>0.181</td>
<td>0.792</td>
</tr>
<tr>
<td>Ghana</td>
<td>25.80</td>
<td>38.52</td>
<td>78</td>
<td>0.096</td>
<td>0.926</td>
</tr>
<tr>
<td>DRC</td>
<td>77.40</td>
<td>73.15</td>
<td>119</td>
<td>0.107</td>
<td>0.529</td>
</tr>
</tbody>
</table>
Other opportunities

• Connections throughout Australia
• International locations would welcome volunteer Australian doctors even for short term with benefits of:
  – Honing of clinical acumen
  – Perspectives on efficiency
  – Significant broadening of experience
  – Personal development
August 1980
Hospital Pharmacy 1981
Soksan Hospital
Old Soksan Hospital
DCH/IPPC

Celebrating 25 years of Paediatric Education

The Sydney Children's Hospitals Network

care, advocacy, research, education

THE UNIVERSITY OF SYDNEY
DCH is the lens through which we see every child and young person more clearly.
DCH / IPPC: Contacts

Adjunct Associate Professor Kathryn Currow
Executive Principal IPPC / DCH
SCHN & the University of Sydney
Phone: +61 2 99338601
Mobile: +61 409 120 247
Fax: +61 2 99338699
Email: kathryn.currow@magga.org.au
Skype: kathrynsuzannecurrow

Catherine Zelinsky
Course & Service Administrator
Phone: +61 2 99338602
Fax: +61 2 99338699
Email: Catherine.zelinsky@magga.org.au

Rita Gudinho
Business Operations Manager
Phone: +61 2 99338605
Fax: +61 2 99338699
Email: Rita.gudinho@magga.org.au

Administration
Phone: +61 2 99338600
Fax: +61 2 99338699
Email: service@magga.org.au

http://www.magga.org.au
Maga = aligns with concept of life long learning in paediatrics as “the path that leads from suffering to wellbeing
Behind the scene challenges

- Sudanese twins: immaculate family
- Mild bronchiolitis
- One noted to have bell-shaped chest
- Mild crackles
- Chest compressed when picked up under armpits: could feel heart
- Proximal limb weakness
Case Report Writing:
Medical Case Report

• Designed to encourage you to reflect on medical problems you encounter

• To promote further reading of latest evidence based best practice to assist with YOUR learning

• Applying this new knowledge in teaching and clinical practice reinforces your learning
Read your Participant Handbook

• Use the template from the IPPC website.
• Upload case reports online.
• Important to ensure that this report is YOUR work. You are able to consult with others & encouraged to read widely.
• If you use quotations from other sources, you need to acknowledge these sources in your report.
• If we find two reports that are the same, no mark will be given to either.
Writing your Case Report: History

• 85% of Paediatric diagnosis comes from a thorough history
• Presenting Complaint and its background
• Past Medical Problems
• Family and Psychosocial history
• Immunisation
• Growth
• Development
• Nutrition
Physical Examination

• Growth parameters
• Centiles
• Systematic approach:
  – Appearance
  – Observations: Pulse; RR; BP; Capillary refill; O2; GCS (if relevant)
  – Relevant positive findings
  – Relevant negative findings
Provisional Diagnosis and Differential Diagnoses

• Write the most likely diagnosis
• List at least 3 differential diagnoses
Investigations

- Pathology: highlighting abnormal results
- Imaging: summary of reports
- Other investigations
Initial Management

• Details of treatments eg medication, fluids
• Review of progress
• Final diagnosis and outcome
Reading and Discussion

• Webcast notes
• Resources listed on IPPC website: lists of free access journals
• Discuss points of relevance to your learning: new knowledge; how this impacts your practice
Health Inequity Case Report

• This case report is to encourage you to consider the broad range of problems faced by a child that impact their healthcare
• PLEASE SEE YOUR HANDBOOK and our website for EXAMPLES
• You need to follow the format carefully
• Outline what health inequity means.....and read further about it for your own learning.
A summary of the Case itself

• Include relevant History; Physical Examination; Investigations and Diagnosis
• Outline the actual Health Inequity problems that this child confronts
• Discuss actions that have been taken to address these issues
• Outline the outcome as a result of YOUR intervention
Example of Health Inequity Case

• A 5 year old child in Sydney with severe bottle caries…….
• Unable to access dental care privately as mother could not afford treatment
• Now has pain with eating and swollen red gums; some night pain as well
• Losing weight
• Long wait for free dental service and treatment
History

• Previous well boy.
• Had been allowed to have formula over night to help him sleep from infancy. This had only been stopped some 3 months before.
• Also drank soft drinks every day.
• Mother had noted severe decay in upper incisors
• Now only able to eat very soft food and drink milk
History continued

• Fully immunised; developmentally normal
• Single mother who is unemployed and on social service payments
• No family supports
• Little knowledge of good nutrition; using food as reward with lots of sweets and sugary drinks
• Not taught dental hygiene
Examination

• Growth: height and weight on 50th centile
• Alert and responsive
• No pallor / bruising / rashes
• Heart sounds normal; chest clear; abdominal examination normal; no rashes
• Obviously severely decayed upper incisors with teeth eroded to gum margins; some mild gingivitis
Health inequity issues

• Severe dental caries: problem of limited knowledge of dental hygiene; poor feeding practices; difficulty affording treatment.

• Reading around this:
  – Incidence of problem
  – What has worked elsewhere
  – How best to educate mother
  – How to enlist services that are affordable
Outcome

• Referred to free dental services with special consideration requested in view of pain and difficulty feeding
• Negotiated urgent surgery to extract severely decayed teeth
• Education re dental hygiene
• Education about regarding feeding practice
• Education re adequate nutrition
Outcome continued

• Reviewed: pain free; eating normally; now regular tooth brushing commenced
• Significant improvement for all family

• And attempts to work with Dental Colleagues to promote the needs of poor children for improved dental education and free dental care
Pearls of wisdom not found in text books: orthopaedic presentations

- Never send home a limping child without doing FBC to exclude ALL
- A traumatic injury in a child < 8yrs resulting in not using limb normally, is a # till proved otherwise; ligaments stronger than bones in this age group
- Age related problems: DDH; TS; Perthe; SCFE
- Patterns #s in child abuse
More Pearls

• Patterns of rashes: HSP
• Infective: Molluscum contagiosum; Peri-anal Streptococcal infection; Streptococcal Scarlet fever; common childhood Exanthemata
• Viral urticaria
• Scabies at different ages
• Dermatological presentations of serious illness eg Dermatomyositis
Considerations

• Congenital problems & syndromal associations
• Specific paediatric problems eg:
  – Febrile convulsions
  – Intussusception
  – Testicular torsion
  – Recognition of early signs of sepsis
  – Early detection of developmental problems
• Age specific problems
Children need

• Attachment, nurture and love
• Adequate nutrition
• Safety
• Stimulation & learning opportunities
• Boundaries & routines
• Preventive measures: immunisation; sun protection; SIDS action; sleep hygiene; obesity & NCD prevention
IPPC : How it helps

• 4/12 baby presented in the Solomon Islands with escalating stridor for 1 week
• Noted by Paediatrician who is IPPC Graduate to have haemangioma on lower cheek
• Recognised association with laryngeal haemangiomata as likely cause because of IPPC Webcast
• Knew current best practice is oral Propranolol.
• Prompt recovery.
• Taught visiting Paediatric Registrar from large Australian teaching hospital who was unaware of both diagnosis & treatment!!
IPPC directly benefits our treatment of children

• From Hanoi 2013: ED Doctor saw 9 day old infant with recent onset of vomiting.
• Baby was critically ill: profound bradycardic (65) with increased pigmentation & high K+.
• Immediately gave IV hydrocortisone for Congenital Adrenal Hyperplasia
• Pulse rate was 135 within 2 minutes
• Life-threatening problem detected, treatment implemented & life saved thanks to Webcast on “Paediatric Endocrine Emergencies”
May occasionally cause problems in infancy

- Diagnosis infrequently made during infancy.....bulging yellow-gray mass; occasionally an abdominal mass with urinary obstruction.
- Urinary pressure and retention, rarely also in young girls, with hydroureter and or hydronephrosis may occur to mass effect & resulting obstruction.......
Imperforate Hymen: variations to consider

• Extreme of spectrum of variations in hymenal configuration

• Variations common: fenestrations; septa; bands; microperforations; anterior displacement; differences in rigidity & / elasticity.
IPPC / IPPNC Study requirements

- 3 hours of teaching from the Sydney Children’s Hospitals Network
- 1 hour face to face teaching IN COUNTRY from local Paediatric doctor
- 4 hours personal study time with course material provided