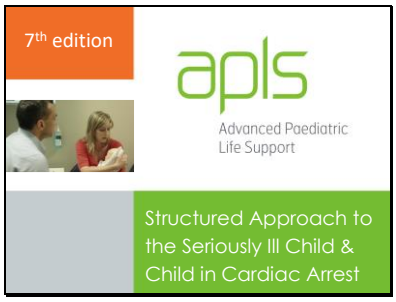
APLS Refresher Course: Illness BLS_ALS Plenary 7th Ed Notes

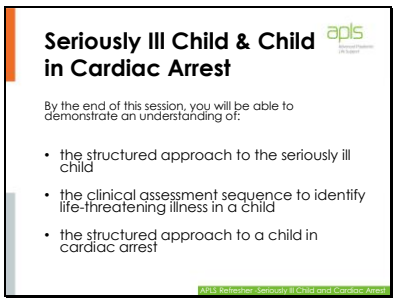
Slide 1



Instructor Notes
This session is 45 mins.

- Read notes on facilitating plenaries.

Slide 2



Consider commencing the session in a usual plenary style and moving into groups of 3-4 after slide 4 (Rapid Assessment).

Sit candidates in groups (3-4 people each group). They will need pen, clip board and 2 double sided copies per group of the A4 Serious Illness Activity Sheet

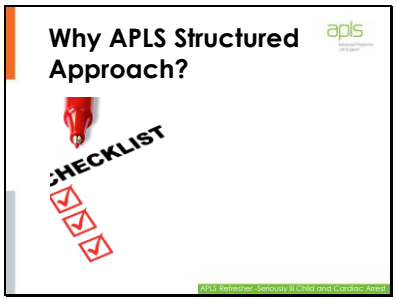
Interactive session is also to:

Candidates nominate a scribe and a spokesperson

ACTIVITY PACKS x 4 - one per group of six candidates

Aim of this session is to recap the recognition and resuscitation of the seriously unwell child, briefly recap identifying when circulatory arrest has occurred, revision of BLS and ALS , and the use of two cases to practice the material discussed

Slide 3



Write down three reasons to have a structured approach to a serious ill child.

I minute for activity – 3 minutes for shared answers

Multiple answers (incl. Human Factors issues - Chapter 2 in 7e)

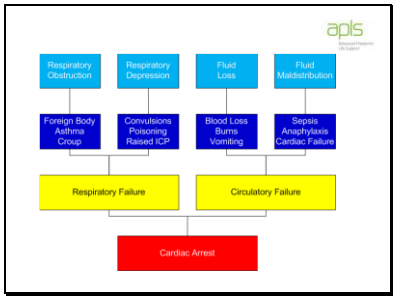
so you don't miss anything
method to calm oneself down in panic position
prioritise assessment and treatment in a logical order
learn an automated response.
Minimise fixation
Shared situational awareness
Communication

•SEGUE to algorithm activity – **click to show aeroplane** - repetition assists in established automated responses

Slide 4

- Human factors - **Chapter 2**

Slide 5



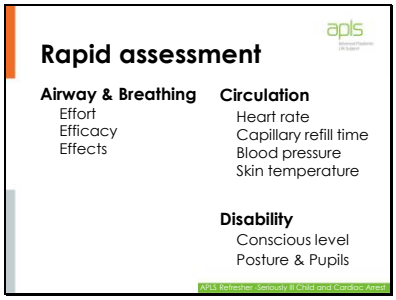
Pathways to cardiac arrest

Pale Blue Row – presenting issue
Dark Blue Row – possible reversible causes
Yellow – where the situations are heading

Talk about how assessment and intervention with the conditions on the top of the slide can prevent or slow progression to the serious consequences on the bottom of the slide.
This involves rapid assessment of the seriously ill child (summarised on next slide).

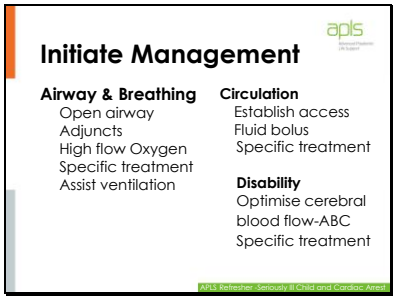
Be brief – this and the next slide is recall from pre-reading and the online learning.
In Disability also mention along with posture COLOUR & TONE
This slide has animation.

Slide 6



Rapid assessment features are emphasised in the online learning – this slide is a prompt for recall of pre-course learning. Give candidates the 'space' to provide the answers.

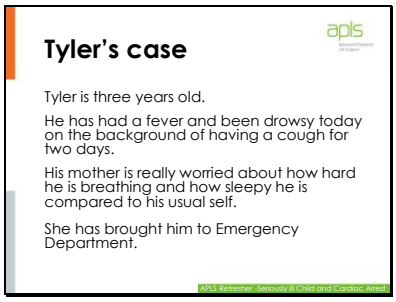
Slide 7



Initial management is similar regardless of cause of the illness
Once more information is available specific treatment can target the cause of the illness

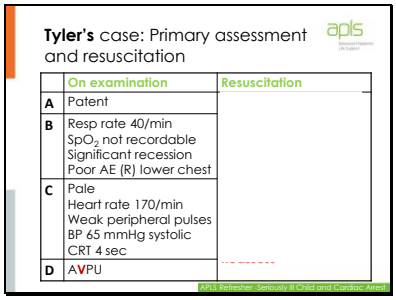
Having a "scaffold" for resuscitation helps the practitioner to provide resuscitation whilst giving more time to gain more information to enable a diagnosis and specific treatment to be found

Slide 8



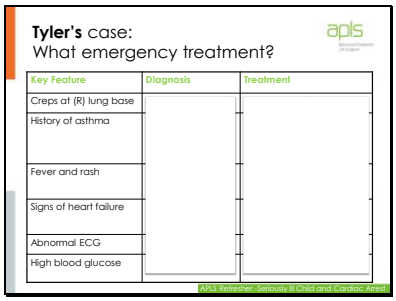
Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of respiratory and circulatory failure and the specific interventions that should be given.
Invite candidates to provide answers to next two slides, including any other key features that they can think of

Slide 9



Allow 2 minutes
See Slide 24 for hidden features

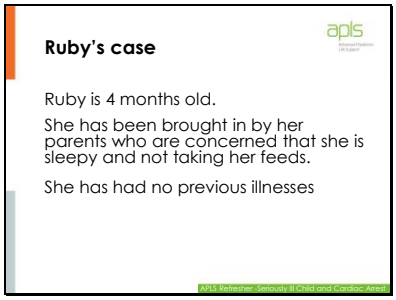
Slide 10



Show key features and ask for diagnosis and emergency treatment.
Ask whether there are any other key features / diagnoses not listed here.

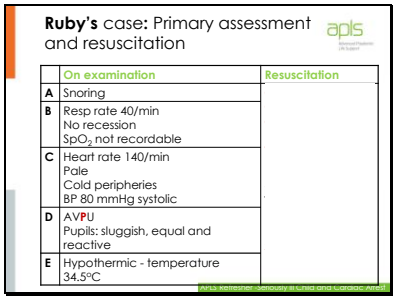
Allow 4 minutes
See Slide 25 for hidden features, diagnosis and treatment.
Note Prostaglandin is in 'grey' font, as a teaching point for infants pg 76-77 (not suitable for Tyler – who is 3 yrs old)

Slide 11



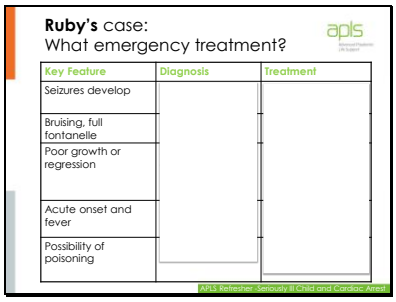
Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of reduced conscious level and the specific interventions that should be given.
Invite candidates to provide answers to next two slides, including any other key features that they can think of before summing up. Eg:
Fever - meningitis
acute onset – cerebrovascular event
high BP – hypertensive encephalopathy
vague and inconsistent history, other trauma in an infant – child abuse

Slide 12



Allow 2 minutes
See Slide 26 for hidden features

Slide 13



Show key features and ask for diagnosis and emergency treatment.
Ask whether there are any other key features / diagnoses not listed here.
E.g.
headaches, acute onset – cerebrovascular event
headaches, high BP – hypertensive encephalopathy
vague and inconsistent history, other trauma in an infant – child abuse

The use of the structured approach in these cases will help ensure early and appropriate treatment. Candidates may practice this in the illness simulations which follow.

Allow 4 minutes
See Slide 27 for hidden features

Slide 14

Pack of laminated sections of BLS and ALS algorithms

5 mins to order cards into BLS and ALS algorithm sequences & keep displayed on table

Start whole group review of questions with activity:

> Tap/clap at CPR rate of 100-120 beats/min - give group min 20 secs – watch, some in group will adapt to others or some stay confident. Encourage whole group to listen to each other & yet know their own beat.

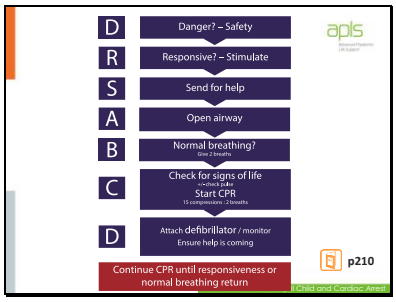
* can use ALSi on CPR rhythm or SR to give audible rate – (set up in advance to ensure volume on iPad is on maximum)
Ask why is CPR rate is at 100-120 beats/min?
- They will know the answer, however knowing doesn't mean doing…….

clinicians (in simulation) haven't shown to be great at keeping rate or sustaining depth –

Studies show that we need repeated practice and feedback on performance – (what they are going to get on the face to face course)

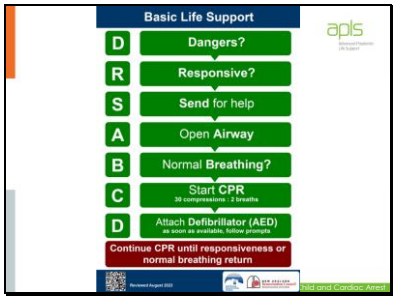
As main evidence for resuscitation is primarily related to effective CPR – need to change manpower to prevent exhaustion & maintain rate and depth

Slide 15



Check with cards on the table

Slide 16

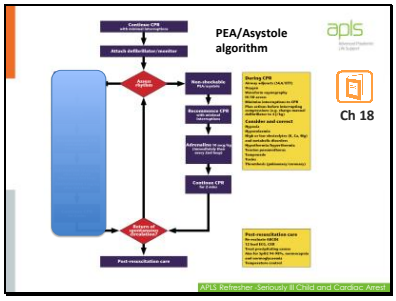


Points of difference

APLS sequence is for trained paediatric healthcare providers

Normal breathing? – Include 2 rescue breaths (children have hypoxic arrests)
Signs of life?
Start CPR 15:2 vs 30:2

Slide 17



Check with cards on the table
5 mins of small group activity

Questions to be answered in their groups – worksheet with questions provided

-**How long is a cycle?**

-**What do you do during the 2 minute cycle?**

When is adrenaline given? VT/VF vs asystole?

Which of the Hs and Ts are of particular importance in asystole?

hypoxia
hypovolaemia
anything else suggested by history of child's illness/injury

Which of the Hs and Ts are of particular importance in PEA?

hypovolaemia
hypocalcaemia
tension pneumothorax
cardiac tamponade
hypothermia
pulmonary embolus

How is ROSC assessed? – why feel for a pulse?
Where do you feel for a pulse?

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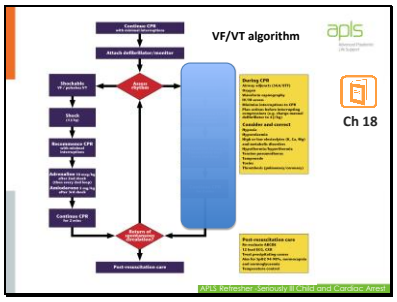
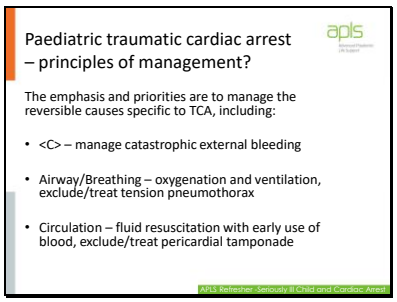


This is the part of the ALS algorithm for VF/VT

Slide 19



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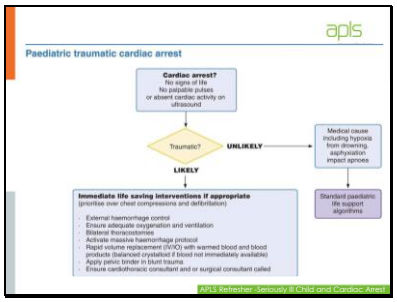

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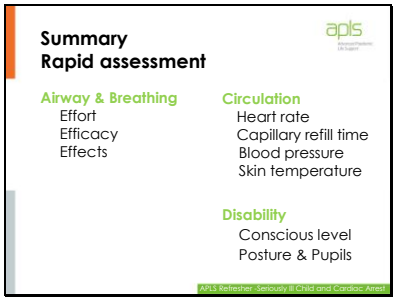
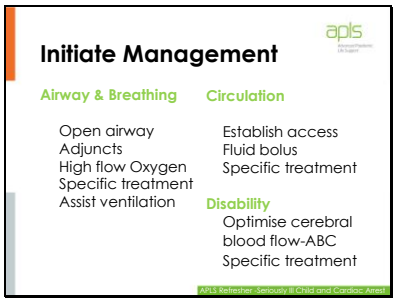
Slide 22



Remember to include tone & colour when you mention posture

Closure – include that further opportunities to discuss assessment and management of illnesses raised in the Serious Illness plenary will be in the workshops and illness scenarios.

Slide 23



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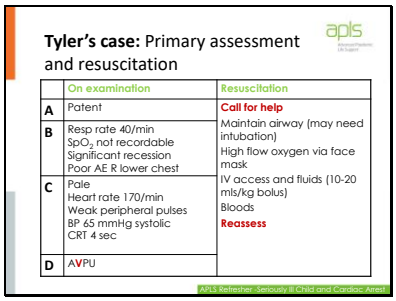

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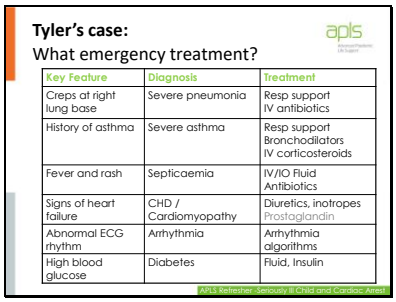

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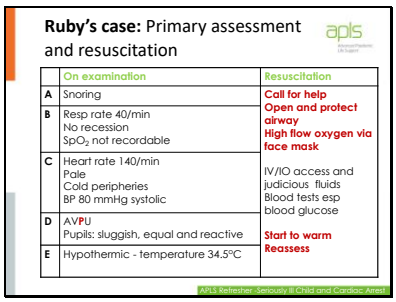

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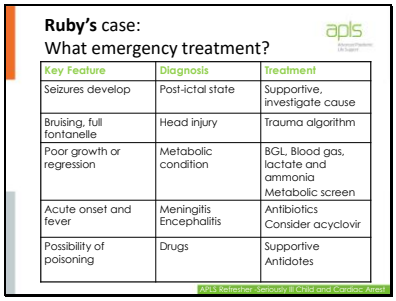

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