

Assessment of the Sick Child – Acute, Urgent and Emergent Presentations

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 **CANADIAN HEALTH CARE AGENCY**
EXPERIENCE THE NORTH

Module 10

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Acute Conditions:	Chronic Conditions:
• Respiratory distress • Skin infections • Otitis Media • MSK injuries • Lice and Scabies	• Asthma • Eczema • Juvenile Arthritis • FASD • ADHD, ODD • Depression • Anxiety

Common Pediatric Conditions

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- Aiden Crow, an 8 month old boy presents to your clinic. When you go to the waiting room you see he appears ill, anxious and has obvious increased work of breathing.
- While providing a history of presenting illness Aiden's mom describes a two day history of a tight cough and fever. His mother is concerned with his noisy breathing and decreased appetite.
- What other questions do you want to ask?

CASE STUDY #1

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Vital Signs:

- Temp 38.5°C Rectal
- HR: 170
- RR: 60
- BP: 90/60
- Peripheral capillary refill: 3-4 seconds
- SPO₂: 92% on RA
- Wt: 10 kg

CASE STUDY #1

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Objective Findings:

- Clear nasal discharge
- Tachycardia
- Pale
- Dry mucous membranes
- Decreased air entry to bases
- Expiratory wheezes
- Retractions (intercostal indrawing and tracheal tug)
- Tachypnea

CASE STUDY #1

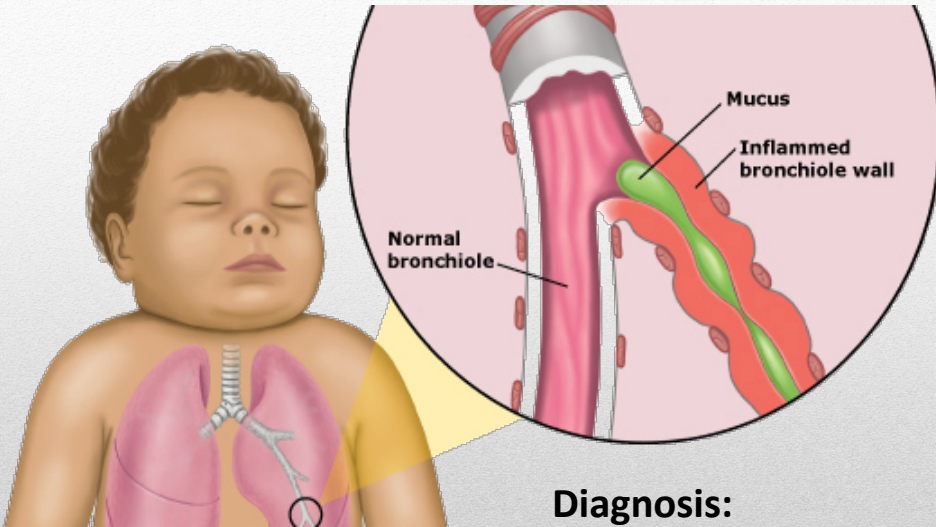
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Differential Diagnoses:

- Reactive Airway Disease
- Asthma
- Pneumonia
- Bronchiolitis
- RSV
- Foreign body obstruction
- Croup

CASE STUDY #1

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Diagnosis:

- Bronchiolitis

CASE STUDY #1

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Respiratory Sign	0	1	2	3
Suprasternal retractions	Absent	--	Present	--
Scalene (accessory) muscle contraction	Absent	--	Present	--
Air entry	Normal	Decreased at bases	Widespread decreased	Absent / minimal
Wheezing	Absent	Expiratory only	Inspiratory and expiratory	Audible without stethoscope / silent chest with minimal air entry
SP02	>/=95%	92% - 94%	<92%	--

CASE STUDY #1: PRAM SCORE

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PRAM	Score
Mild	0 - 3
Moderate	4 – 7
Severe	8 – 12

Treatment Plan :

- Initiate O2 6-10 L via mask to maintain O2 sats >97%
- Treat Fever with Tylenol 15mg/kg PO/PR q4h prn
- Initiate IV access and start NS TKVO
- Consult physician to obtain further treatment orders

Can this paediatric client stay in the community?

CASE STUDY #1

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Moderate to Severe Treatment:

- Ventolin 2.5mg nebulized or Ventolin 4-10 puffs via MDI and spacer with face mask
- Epinephrine 1:1000 (1mg/ml) 0.5ml/kg per dose. Max dose 5ml. Dilute with 2.5 ml of NS and administer nebulized

CASE STUDY #1

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Improvement

- Further treatment in the clinic is warranted with the goal being discharge to home with a care plan
- Reassessment in the clinic within the next 24 hrs.

No improvement

- Initiate transfer of client to a higher level of care
- **Medevac**
 - Signs of respiratory distress
 - Episodes of cyanosis with apnea
 - Pre-existing respiratory or cardiac disease
 - Decreased oxygen saturations
 - Inability to tolerate feeding
 - Less than 3 months of age
 - Cannot be watched at home for signs of respiratory distress

CASE STUDY #1

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- Kia Koostachin, a 5 year old male is called in from the waiting room with his Auntie. He jumps up out of his chair and walks with his Aunt into the exam room.
- You notice his clothes are dirty and his overall hygiene is poor. He has very obvious lesions on his face. His Aunt doesn't know when the lesions started but she knows there have been other children in the house with the same type of sores.
- Patient has been eating well, stooling and voiding as normal. Has been alert and playing as normal with the other children in the home. As far as the Aunt knows the whole family uses one face towel in the bathroom for cleaning up.
- What other questions do you want to ask?



CASE STUDY #2

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Vital Signs:

- Temp: 36.7°C
- HR: 80
- RR: 22
- BP: 85/55
- Capillary refill: <2 sec
- SPo2: 99% on RA
- Hgb: 120
- Wgt: 17 kg

CASE STUDY #2

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Objective Findings:



CASE STUDY #2

Differential diagnosis:

- Infection associated with eczema, contact dermatitis or scabies
- Impetigo
- Herpes simplex infection
- Chickenpox infection
- Cellulitis
- Insect bites

CASE STUDY #2

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Diagnosis:

- Impetigo



CASE STUDY #2

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Determining Treatment Plan:

- Are the lesions localized to a few areas or are they wide spread?
- Is there a fever or systemic concerns

“The goals of treatment is to control the infection and prevent the spread to others”

CASE STUDY #2

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Mild

- Mupirocin (Bactroban) topically TID for 7-10 days
- Follow up in 3 – 5 days to assess response to treatment

Moderate to Severe

- Cephalexin (Keflex) PO 25-50 mg/kg div QID for 10 days
- Trimethoprim/ Sulfamethoxazole (Septra) PO if MRSA positive

CASE STUDY #2

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- Kimberly Beardy, a 9 year old female is brought into the nursing station by her mother with complaints of an intermittent fever for two weeks and sore throat which has resolved. She is now complaining of a three day history of joint pain and swelling.



CASE STUDY #3

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Rheumatic Fever (Carditis)

- Diffuse inflammatory disease of connective tissues, which involves the heart, joints, skin, central nervous system and subcutaneous tissue.
- Arises from immune complications of group A β -hemolytic streptococcal infection from pharyngitis or cellulitis 2-5 weeks prior to onset.

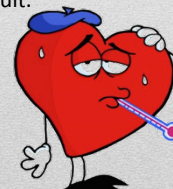
Symptoms:

- Fever
- Joint pain,
- Redness and swelling (migratory arthritis, typically involving the large joints)
- Shortness of breath,
- Edema,
- Cough,
- Fatigue (representing heart failure)
- Rash (erythema marginatum)

Non-pharm Interventions – Medevac

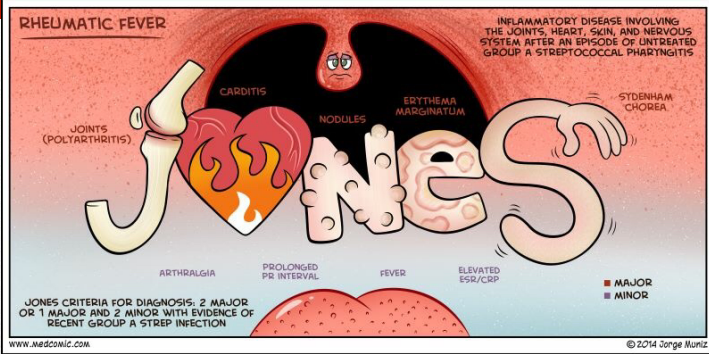
Pharmacologic Interventions

- Treatment involves antibiotics against group A strep, anti-inflammatories and if needed, therapy for heart failure.
- Medications should not be started until the diagnosis has been clearly established, and only with a MD/NP consult.



Rheumatic Fever (Carditis)

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RHEUMATIC FEVER

INFLAMMATORY DISEASE INVOLVING THE JOINTS, HEART, SKIN, AND NERVOUS SYSTEM AFTER AN EPISODE OF UNTREATED GROUP A STREPTOCOCCAL PHARYNGITIS

JOINTS (POLYARTHRITIS)

CARDITIS

ERYTHEMA MARGINATUM

SYDENHAM CHOREA

MAJOR

MINOR

JONES CRITERIA FOR DIAGNOSIS: 2 MAJOR OR 1 MAJOR AND 2 MINOR WITH EVIDENCE OF RECENT GROUP A STREP INFECTION

2 Major, or 1 major and 2 minor with evidence of recent strep infection

Major:

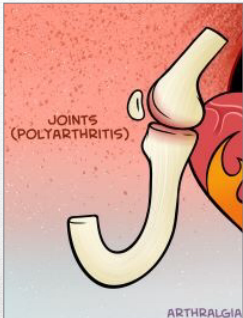
- Joints (polyarthritis)
- Carditis
- Sub-Q Nodules
- Erythema Marginatum
- Sydenham Chorea

Minor:

- Arthralgia
- Prolonged P-R interval
- Fever
- Elevated ESR/CRP

Jones Criteria for Rheumatic Fever

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JOINTS (POLYARTHRITIS)

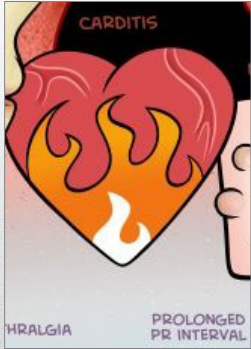
ARTHRALGIA



- Earliest symptomatic manifestation of ARF: presents within 21 days of GAS infection.
- More common and more severe in teenagers and young adults, may be severe enough to severely limit movement.
- Affects several joints in quick succession, for 2 to 7 days, giving the appearance of "migration" from joint to joint (knees, ankles, elbows, and wrists)
- Radiographic evaluation of affected joints is not routinely performed.

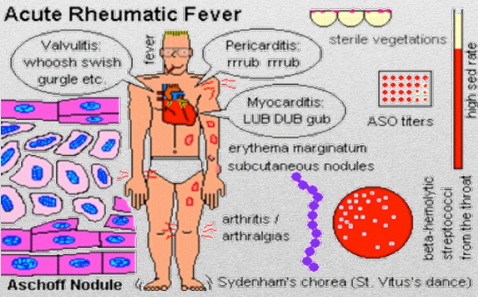
Rheumatic Fever – Arthritis (“Joints”)

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<https://www.youtube.com/watch?v=6StYVx6BVLo>

- Myocarditis and pericarditis may occur in ARF, the predominant manifestation of carditis presents as a **valvulitis**, especially of the **mitral** and **aortic** valves.
- Valvulitis is established by auscultatory findings with echocardiographic evidence of mitral or aortic regurgitation.
- Damage to cardiac valves may be progressive and chronic, resulting in cardiac decompensation.



Acute Rheumatic Fever

Rheumatic Fever - Carditis

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Rheumatic Fever Symptoms

Pink or red skin rash

Red, swollen, inflamed joints

Pain

- Subcutaneous
- Painless, Pea Sized
- Firm, non-tender
- Most common along exterior surfaces of bone, knees
- Lasts a few days, usually resolved without incident.



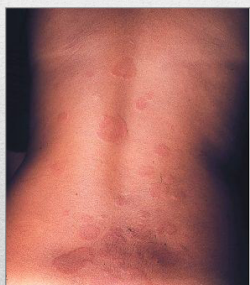
NODULES

Must have a history of strep infection, throat etc. to qualify



Rheumatic Fever – Nodules

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- Evanescent, pink or faintly red, nonpruritic rash involving the trunk and sometimes the limbs but not the face.
- Usually occurs early in the course of ARF,
- In some instances, it persists or recurs after all other manifestations have resolved.
- Erythema marginatum most commonly occurs in patients with acute carditis but has been reported in patients with chronic carditis.
- It rarely occurs as the sole manifestation of ARF.
- The outer edge of the lesion is sharp; the inner edge is diffuse.
- The lesion is also known as "erythema annulare" since the margin of the lesion is usually continuous, making a ring
- Individual lesions may appear, disappear, and reappear in a matter of hours. A hot bath or shower may make them more evident.

Rheumatic Fever – Erythema Marginatum ©CHCA 2018



- Sydenham chorea (also known as "St. Vitus dance")
- Neurologic disorder consisting of abrupt, non rhythmic, involuntary movements, muscular weakness, and emotional disturbances.
- Typically presents one to eight months after a GAS infection, and may occur as an isolated finding.
- More common in girls and may present as refusal to go to school and self-isolation due to shame and embarrassment.
- Fully recovery usually within six weeks and nearly all within six months, with only rare cases described lasting longer than that.
- Movements are more marked on one side, are occasionally unilateral (hemichorea), and cease during sleep.

<https://www.youtube.com/watch?v=-Os3T6Yz7w0>

Rheumatic Fever – Sydenham Chorea ©CHCA 2018

- 10 year old male client with history of several days of vomiting and diarrhea and poor oral intake.
- Initial assessment of client appears pale in colour, increased respiratory rate, no increased respiratory effort. He appears tired requiring his family member to assist him into the assessment room.
- What other questions do you want to ask?



CASE STUDY #4

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Vital Signs:

- HR: 130 beats/min
- RR: 30 breaths/min
- SpO₂: 96% room air
- BP: 80/48 mmHg
- Temp: 37.6°C
- Wt: 50kg

CASE STUDY #4

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Objective Findings:

- Neuro: responds to verbal stimuli, tired, listless, PERRLA
- HEENT: mucous membranes dry, sunken eyes, pale facial colour, otherwise unremarkable
- Neck: no nodes
- Resp: GAEB, increased rate, no accessory muscle use
- Card: S1S2, no murmurs, no S3S4, tachycardia, regular rate, peripheral pulses weak, cap refill 3 seconds; no gallop
- GI/GU: scaphoid abdomen, diffuse tenderness, hyperactive bowel sounds, no organomegaly or masses
- Derm: no rashes, no edema, skin cool to touch

CASE STUDY #4

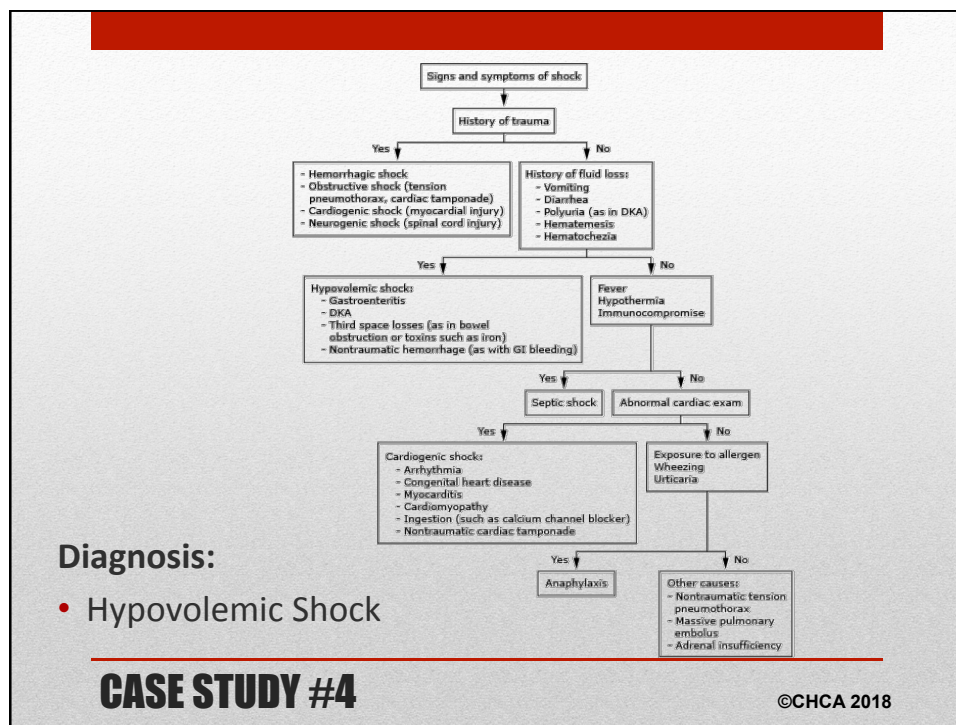
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Differential diagnosis:

- Hypovolemia
- Sepsis
- Tachyarrhythmia
- Trauma
- Anaphylaxis

CASE STUDY #4

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Finding	Mild (3-5%)	Moderate (6-9%)	Severe ($\geq 10\%$)
Pulse	Full, normal rate	rapid	Rapid and weak or absent
Systolic BP	Normal	Normal to low	Low
Respirations	Normal	Deep, increased	Deep tachypnea or decreased and absent
Buccal mucosa	Slightly dry	Dry	Parched
Anterior fontonelle	Normal	Sunken	Markedly sunken
Skin turgor	Normal	Reduced	Tenting
Skin	Normal	Cool	Cool, mottled, acrocyanosis
Urine output	Normal, mildly reduced	Markedly reduced	Anuria
Systemic signs	Increased thirst	Listlessness, irritability	Grunting, lethargy, coma

CASE STUDY #4

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- What would you do....
 - If this client presented during regular clinic hours?

CASE STUDY #4

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- What would you do....
 - If this client presented during regular clinic hours?
 - If this client presented afterhours and you were first on call?

CASE STUDY #4

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- What would you do....
 - If this client presented during regular clinic hours?
 - If this client presented afterhours and you were first on call?
 - If you were called in as second on-call?

CASE STUDY #4

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Interventions:

- Assess ABCs
- Consult physician as soon as client is stabilized
- Apply oxygen 6 – 15L/min via non re-breather mask to keep saturation > 97%
- Trendelenburg position
- Insert 2 large bore IV lines; IO as needed
- Saline bolus 20ml/kg over 20 minutes
- Blood work
- CXR

CASE STUDY #4

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Improvement	No improvement
• Monitor ABCs, vital signs, intake and urine output • Provide update to physician • Adjust IV fluids as needed • Monitor for other underlying causes for shock • Assess stability of preexisting medical problems (i.e. Diabetes)	• Repeat bolus 20ml/kg • Provide update to physician • Reassess after each bolus • Initiate transfer of client to a higher level of care • Medevac
CASE STUDY #4	©CHCA 2018

Improvement	No improvement
• Monitor ABCs, vital signs, intake and urine output • Provide update to physician • Adjust IV fluids as needed • Monitor for other underlying causes for shock • Assess stability of preexisting medical problems (i.e. Diabetes)	• Repeat bolus 20ml/kg • Provide update to physician • Reassess after each bolus • Initiate transfer of client to a higher level of care • Medevac
	What if you are snowed in?
CASE STUDY #4	©CHCA 2018

- First Nations and Inuit Health Branch Pediatric Clinical Practice Guidelines for Nurses in Primary Care (2010); Health Canada
- Physical Examination and Health Assessment; Carlyn Jarvis (2004)

References

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Part 2 Paediatric Procedures

Developed by Aric Rankin NP-PHC, MN
2016 Revision by Valerie Rzepkal NP-PHC, BScN, MSc.



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- Procedural Preparation
- Intravenous Access
 - Venipuncture, Phlebotomy procedures
 - Intraosseous access
- Fluid requirements
- Nasogastric or Oro-gastric tube insertion
- Urinary catheterization
- Pediatric prescribing

Learning Objective Topics

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- Assess pediatric patient's developmental level
- Explain the procedure to patient and family according to their developmental level
- Consider the patient's previous experiences and culture
- Provide procedural and sensory information to patient
- Assess patient's understanding
- Offer caregiver the option to stay or leave during the procedure

Procedural Preparation

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RESTRAINT TIPS:

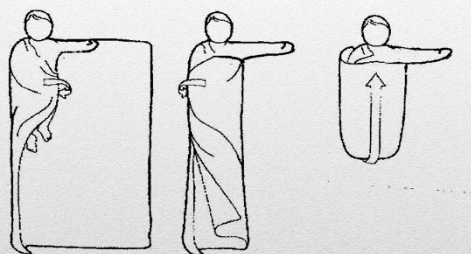
- Patient should be positioned in a manner that is comfortable for the patient and conducive to the procedure
- Secure, comforting, well-supported position
- Close physical contact between the child and the caregiver
- Opportunity for the caregiver to participate in their child's care
- Effective immobilization with techniques that use fewer people

*** **Clinical Caveats:** prepare anticipated equipment before restraint, immobilize joints as they are very flexible, be prepared for sudden movements and protect yourself.

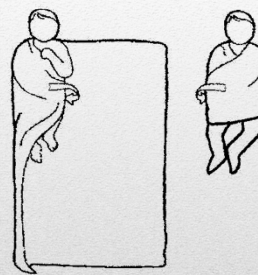
Procedural Preparation

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- The least restrictive methods of controlling the pediatric patient's movements should be used when possible.



Swaddling for access to the arm



Swaddling for access to the legs

Do you have any techniques for restraining a pediatric patients for procedures?

Procedural Preparation

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- The least restrictive methods of controlling the pediatric patient's movements should be used when possible.



Cuddle Restraint



Straddle Restraint

Do you have any techniques for restraining a pediatric patients for procedures?

Procedural Preparation

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Indications:

- Prior to intravenous access
- Prior to venipuncture for specimen collection

Contraindications:

- Emergency situations
- Neonates < 37 weeks' gestation
- Known allergy to topical anesthetic
- Hx of congenital or idiopathic methemoglobinemia
- Infants < 12 months of age who are receiving treatment with methemoglobin-inducing agents (i.e. sulfas, phenytoin)

Topical Anesthesia

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Module 10 - Acute, Urgent and Emergent Sick Child Case Studies and Paediatric Procedures

Medication	Indication	Dose	Onset/Peak	Duration
Tetracaine 4% (Ametop)	Venipuncture, IV, LP	1.5g covers 6x5cm (max 3gm/24hr for children < 5 yrs; max 7.5gm/24hr for children > 5 yrs) Not for mucous membranes Use for intact skin only	30 min venipuncture 45 min IV, LP	4-6 hrs
Lidocaine 2.5%, prilocaine 2.5% (EMLA)	Venipuncture, IV, LP	Age/Wt dependant 0-3m (<5kg): max 1g/10x10cm/>1hr app time 3-12m (>5kg): max 2g 20x20cm/>4hr app time 1-6y (>10kg): max 10g/100x100cm 7-12y (>20kg): max 20g/200x200cm/>4hr app time Not for neonates (gestation age <37 weeks)	60 min	4-6 hrs
Lidocaine 4%, Epinephrine 0.1%, Tetracaine 0.5% (LET gel)	Laceration repair	1-3ml with cotton tipped applicator around edges and directly in wound (max dose Lidocaine with Epinephrine 7mg/kg or 0.175ml/kg LET gel) Not for use on mucous membranes Use for non-intact skin only Not for ages < 12 months May be considered for end-arteriolar extremities (fingers, toes, penis, nose)	30 min	60 min
Lidocaine 2% viscous	inflamed mucous membranes	Max 5mg/kg Lidocaine (0.25ml/kg) Max 4 doses/24 hrs	5-10 min	20-30 min

Topical Anesthesia

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Upper Extremity:

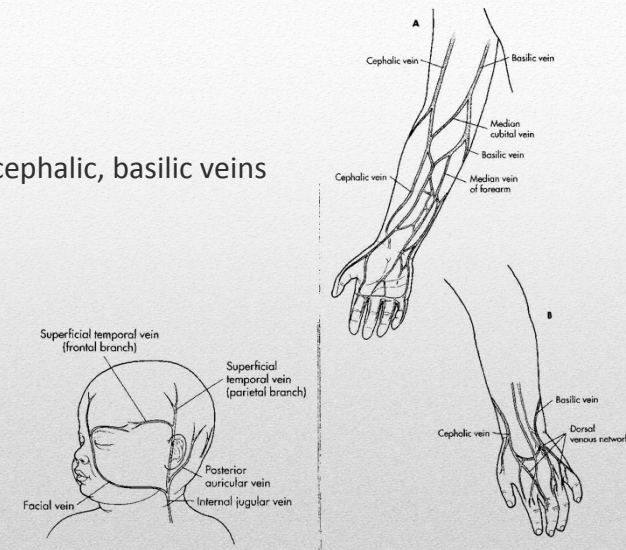
- Dorsum of hand
- Wrist
- Median cubital, cephalic, basilic veins

Lower Extremity:

- Feet
- Saphenous vein

Other:

- Scalp



Intravenous Access

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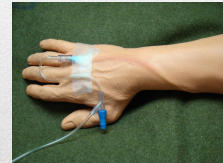
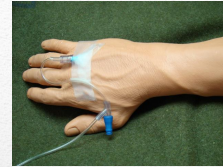
COMPLICATIONS:

Local:

- Cellulitis
- Phlebitis
- Thrombosis
- Hematoma formation
- Hemorrhage
- Extravasation of IV fluids into interstitial spaces

Systemic:

- Sepsis
- Air embolism
- Catheter fragment embolism
- Pulmonary thromboembolism



Intravenous Access

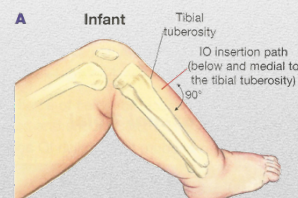
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Indications

- Emergency situations only (discontinue when reliable vascular access is established, usually < 24 hours)
- Any age
- Emergency when access cannot be achieved within 60-90 seconds

Contraindications:

- Pelvic fracture (only for lower access points)
- Infection to area (i.e. cellulitis)
- Previous attempt to area
- Hx of osteogenesis imperfecta (brittle bone disease)

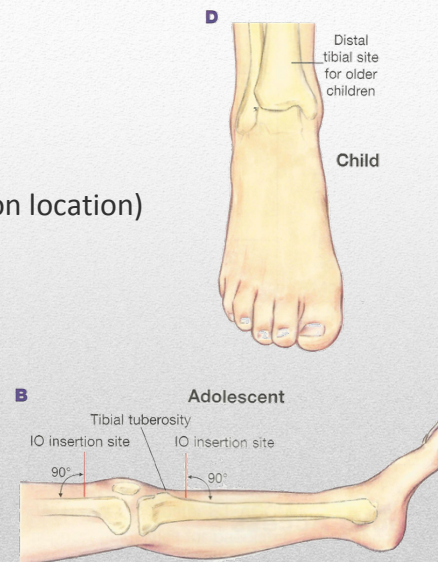


Intraosseous Access

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COMPLICATIONS:

- Extravasation
- Fracture
- Osteomyelitis
- Epiphyseal injury (depending on location)
- Hemorrhage
- Fat embolism
- Subcutaneous abscess
- Tissue necrosis
- Compartment syndrome



Intraosseous Access

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- Maintenance fluid is the amount of fluid the body requires to replace losses.

TYPES OF INTRAVENOUS FLUIDS:

- Isotonic crystalloid solution (*normal saline, lactated Ringer's*)
 - Distributed in the extracellular compartment.
 - They do not expand in the intravascular space (1/4th of their volume remains in the intravascular space, the remainder moves to the extravascular place)
- Colloid solutions (*albumin, hydroxyethyl starch solutions, dextrans or gel solutions*)
 - Contain relatively large molecules that remain in the intravascular compartment hours longer than isotonic crystalloids.
 - Excellent volume expanders.

Fluid Requirement

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The 4:2:1 Rule for Fluid Maintenance:

- 4ml/kg/hour for the first 10kg of weight
- 2ml/kg/hour for the next 10kg of weight
- 1ml/kg/hour for each additional kg of weight

Case Scenario

Jenny Turtle a 4 y/o female has had a history of vomiting and non bloody diarrhea for 5 days. She appears tired, dark circles under her eyes, dry mucous membranes, poor skin turgor, and she does not make tear when upset. She has an IV in place and a NS bolus of 400ml is infusing. Her weight is 22kg.

- 1) Is the fluid bolus appropriate for her weight?
- 2) What is Jenny's fluid maintenance according to the 4:2:1 rule?

Fluid Requirement

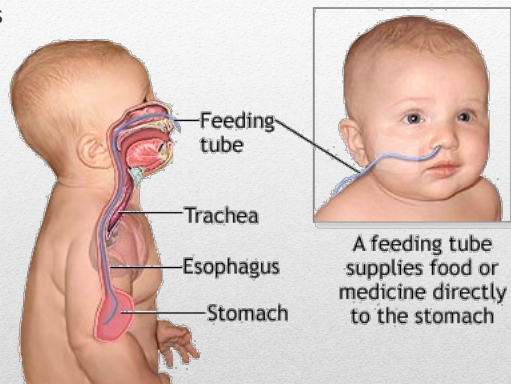
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Indications

- Administration of medications
- Treatment of ileus or bowel obstruction
- Enteral nutrition
- Stomach lavage

Contraindications

- Basilar skull fracture
- Esophageal varices
- Esophageal stricture (relative contraindication)
- Coagulation abnormality (relative contraindication)
- Alkaline ingestion (relative contraindication)



ADAM.

Gastric Tubes

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Oro-gastric Tubes

Indications: Facial injury, skull fracture, abnormal facial anatomy, < 6 months of age

Estimate length: extend tubing from corner of the mouth to the ear lobe and then to the xiphoid process

Nasogastric Tubes

Indications: All others

Estimate length: extend the tubing from the tip of the child's nose to the ear lobe and then to the xiphoid process.

Gastric Tubes

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COMPLICATIONS:

- Placement into the bronchial tree
- Curling of tube within the esophagus
- Epistaxis
- Aspiration
- Nasal alar ulceration or necrosis
- Perforation with hemorrhage



Gastric Tubes

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Indications:

- urine for culture (r/o UTI)
- relieve urinary retention
- monitor urinary output

Contraindications:

- urethral injury / blood at urethral meatus (i.e. pelvic trauma)
- urethral stricture
- Scrotal hematoma or ecchymosis
- recent urinary tract surgery
- presence of artificial sphincter

Urinary Catheter Insertion

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COMMON MEDICATIONS:

• Tylenol (acetaminophen, Tempra)

- Infant liquid 80mg/ml
- Children liquid 160mg/5ml
- Children chewable: 80mg tab, 160mg tab

Dosing: 15mg/kg Q4 hours PO PRN

• Advil (ibuprofen, Motrin)

- Infant liquid 40mg/ml
- Children liquid 100mg/5ml
- Children chewable: 50mg tab, 100mg tab

Dosing: 10mg/kg Q6hours PO PRN

• Benadryl (diphenhydramine)

- Children liquid 12.5mg/5ml
- Children chewable: 12.5mg tab

Dosing: 1-2mg/kg/Q6hr

2-6y: 6.25mg Q4-6hr (max 37.5mg/day)

6-12y: 12.5mg-25mg Q4-6hr (max 150mg/day)

>12y: 25-50mg Q4-6hr (max 300mg/day)

• Gravol (dimenhydrinate)

- Children liquid 15mg/5ml
- Children chewable 25mg tab, 50mg tab

Dosing: 5mg/kg/Q8hr

2-6y: 12.5-25mg Q6-8hr (max 75mg/day)

6-12y: 12.5-25mg Q6-8hr (max 150mg/day)

>12y: 25-50mg Q6-8hr (max 400mg/day)

Pediatric Prescribing

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COMMON SUSPENSION ANTIBIOTICS:

- | | |
|---|---|
| <ul style="list-style-type: none">• Amoxicillin (A)<ul style="list-style-type: none">• Suspension 125mg/5ml 100ml• Suspension 250mg/5ml 100ml <p>Dosing OM: 80mg/kg/day BID-TID x 5-10 days</p> <p>Dosing GAS: 50mg/kg/day BID-TID x 5-10days</p> <ul style="list-style-type: none">• Sulfamethoxazole-trimethoprim (Septra) (A)<ul style="list-style-type: none">• Suspension 8mg/40mg/ml 100ml <p>Dosing: 5-10mg/kg/day BID x 10 days</p> | <ul style="list-style-type: none">• Penicillin V (Pen Vee K) (A)<ul style="list-style-type: none">• Suspension 300/5ml 100ml <p>Dosing: 25-50mg/kg/day BID x 5-10 days</p> <ul style="list-style-type: none">• Cloxacillin (Orbenin) (A)<ul style="list-style-type: none">• Suspension 25mg/ml 100ml <p>Dosing: 50-100mg/kg/day Q6hrs x 7-10 days</p> <p>Other common antibiotics:</p> <ul style="list-style-type: none">• Azithromycin (B/C)• Clarithromycin (B/C)• Amoxicillin-Clavulanic Acid (B/C)• Cephalexin (Keflex) (C) |
|---|---|

Pediatric Prescribing

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Case Scenario

A mother brings Caleb Fiddler an 18 month boy into the clinic because he has been feverish, crying and pulling at his right ear for 2 days. As the community health nurse you diagnose an uncomplicated acute otitis media.

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- $15\text{kg} \times 80\text{mg/kg/day} = 1200\text{mg/day}$
- $1200\text{mg/day} / \text{BID (2) or TID (3)} = 600\text{mg BID or } 400\text{mg TID}$
- $600\text{mg} / 250\text{mg/5ml} = 12\text{ml/dose}$
- $400\text{mg} / 250\text{mg/5m} = 8\text{ml/dose}$

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- 3) How many bottles will you supply
 - Amox: 250mg/5ml 400mg (8ml) TID x 10 days
 - $8\text{ml} \times \text{TID (3)} = 24\text{ml/day}$
 - $24\text{ml} \times 10\text{days} = 240\text{ml total}$ 240ml / 100ml/bottle

Antibiotic therapy, first-line drug:

amoxicillin (Amoxil), 80–90 mg/kg/day, divided bid or tid, PO for 5–7 days

For children < 2 years old or with a perforated ear drum, treat for 10 days with amoxicillin.

For penicillin/beta-lactam allergy or known beta-lactamase resistance in the community:

azithromycin 10 mg/kg/day first day then 5 mg/kg/day PO for the remaining 4 days

Pediatric Prescribing

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The following competencies for pediatric procedures includes but is not limited to the diagnosis and treatment of the following:

- Procedural preparation
- Knowledge of topical anesthetic medications
- Venipuncture
- Intravenous access
- Intra-osseous access
- Fluid requirements for pediatric population
- Gastric tube insertion
- Urinary catheter insertion
- Paediatric prescribing

Competency List

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