Identifying Warning Signs During Routine Patient Encounters

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Objectives

- Upon completion of this activity, the participant will be able to:
  - Discuss abnormalities on physical examination which might warrant additional evaluation
  - Discuss treatment options for patients with these abnormalities
  - Identify those abnormalities noted on physical examination which warrant emergent evaluation by specialty or emergency department

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Faculty Disclosure

Wendy L. Wright, DNP, ANP-BC, FNP-BC, FAANP, FAAN, FNAP has the following relevant financial relationships with commercial interests to disclose:

- Consultant:
  - Pfizer, Merck, Sanofi, Seqirus, and Moderna –Vaccines
  - GlaxoSmithKline – OA/Pain
  - Bayer – CKD
  - Idorsia – Sleep
  - Seqirus – Vaccines
  - Shield Therapeutics - IDA
- Speakers Bureau:
  - Pfizer, Merck, Sanofi, Seqirus, and Moderna – Vaccines
  - AbbVie and Biohaven – Migraines
  - Idorsia: Insomnia

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Dermatologic Abnormalities

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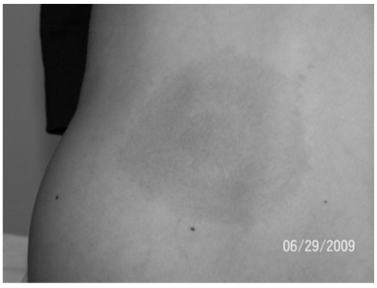
Summer 2009



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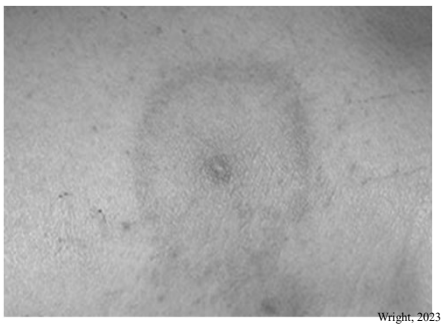
Erythema Migrans



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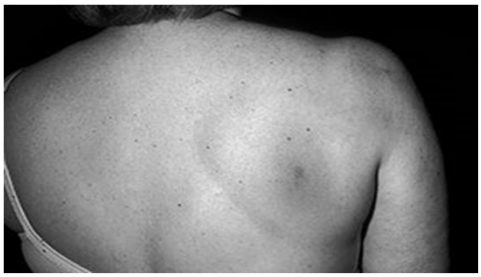
Erythema Migrans



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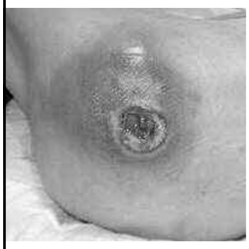
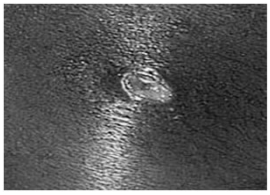
CA-MRSA





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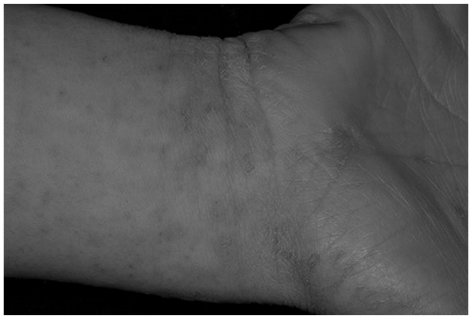
Scabies



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Scabies

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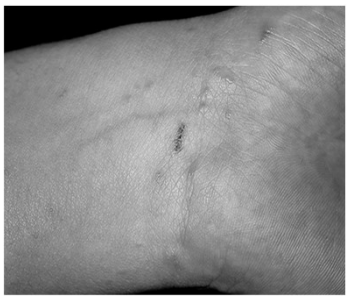

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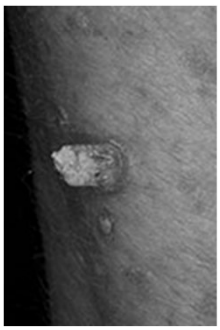
Actinic Keratosis

- Keratin may accumulate and transform lesion into a cutaneous horn
- Frequently seen on the pinna of the ear



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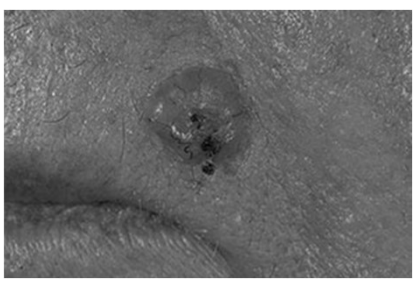
Basal Cell Carcinoma



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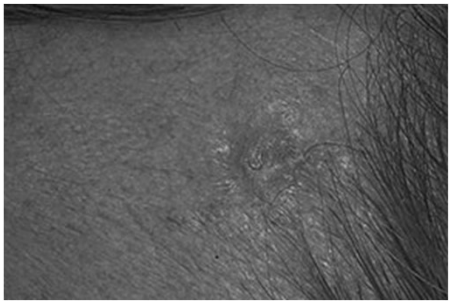
Basal Cell Carcinoma



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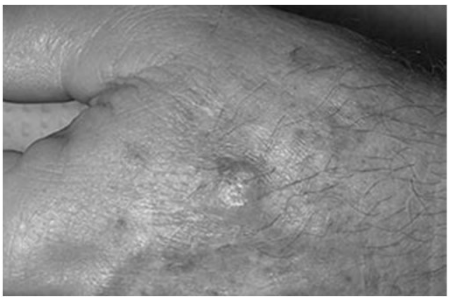
Squamous Cell Carcinoma



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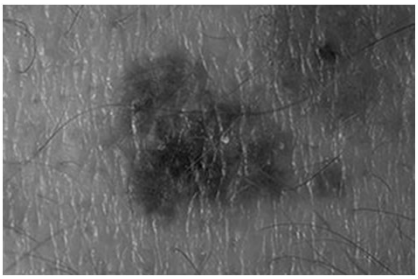
Malignant Melanoma



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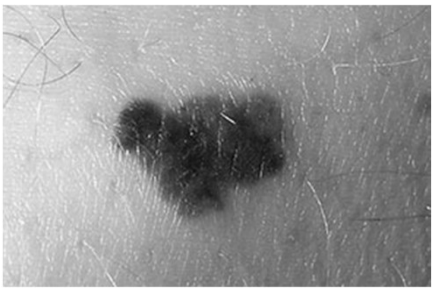
Malignant Melanoma



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HEENT Abnormalities

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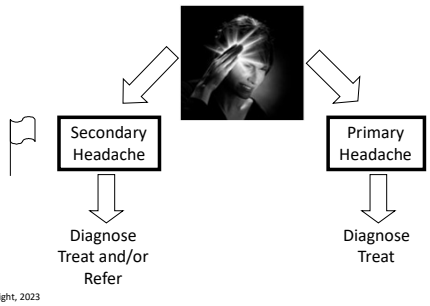
Headache Diagnosis: *Primary Versus Secondary Headache*

Evaluate for Signs or Symptoms of Secondary Headache



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Secondary Headaches: Prevalence

- 1% of office HA presentations
- 3.8% of ED HA presentations

Bigal M, et al. *Headache* 2000;40:241-247. • Ramirez-Lassepas M, et al. *Arch Neurol* 1997;54:1506-1509.

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Features Suggestive of Secondary Headache: *SNOOP*

Systemic symptoms or signs of systemic disease
- Fever, myalgias, weight loss
- Malignancy, acquired immunodeficiency syndrome

Neurological symptoms or signs

Onset sudden (thunderclap headache)

Onset before age 5 years or after age 50 years

Pattern change
- Progressive headache with loss of headache-free periods
- Change in type of headache

Dodick DW. *Adv Stud Med*. 2003;3:87-92.

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Red Flags for Secondary Headache

- Indications for HA workup
  - First/worst HA
  - Abrupt-onset HA
  - Progression or fundamental change in pattern
  - New HA in those <5 yo or >50 yo
  - New HA with cancer, immunosuppression
  - HA with syncope or seizure
  - HA triggered by exertion/Valsalva/sex
  - Neurologic symptoms >1 hour in duration
  - Abnormal general or neurologic examination

Dodick DW. *Adv Stud Med*. 2003;3:87-92.

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Case Study 6: JD

- 1 week history of blurred vision and worsening headache in a 46 year old male.
  - Headache is 5 on 1-10 scale; now associated with vomiting and blurred vision
  - Seen 3 days ago, diagnosed tension headache
  - No improvement despite medications
  - Had been feeling well until this began; No other symptoms

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Case Study 6: JD

- PE: VSS
- Head: N/C; no abnormalities
- Ears: Canals/TM's normal; hearing intact
- Nose: Turb/mucosa normal; no discharge, abnormalities
- Mouth: Mucosa moist; tongue midline; Gag intact
- Nodes: nonpalp, nontender
- Lungs: clear bilaterally; no c/w/r

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Case Study 6: JD

- CN II – XII intact; exceptions noted
  - Papilledema
  - Conversant but slow responses to questions.
  - Neat and clean
  - Seems to stare at examiner
  - Tries to smile at times; not always appropriate for the situation

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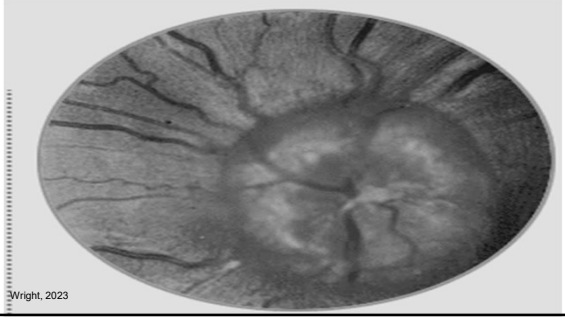
Papilledema



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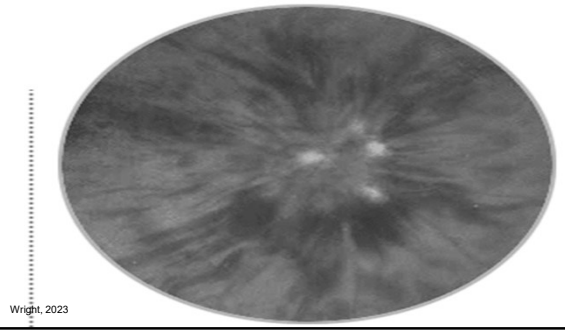
Papilledema



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Diagnostics

- CT with contrast ordered stat
  - MRI is the most sensitive test, particularly when gadolinium (contrast)
- Stat CT scan confirmed a large glioblastoma in the frontal region
  - Within 4 hours, underwent a debulking procedure
  - Pathology confirmed and experimental chemotherapy was initiated
  - Unfortunately, tumor was fatal with 3-4 months of presentation

http://emedicine.medscape.com/article/1217204-overview accessed 06-01-2011

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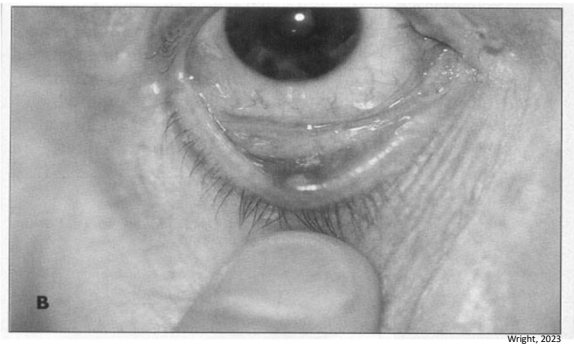
Internal Hordeola



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Abrasions: Never Patch…

- Contact lens abrasion
- Abrasion of cornea caused by food or plant material
- Individual with diabetes
- Why?

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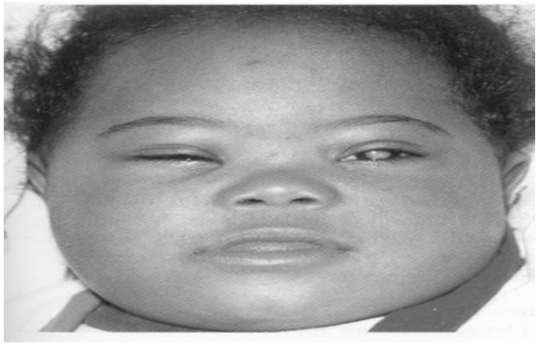
Leukocoria



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Ptosis

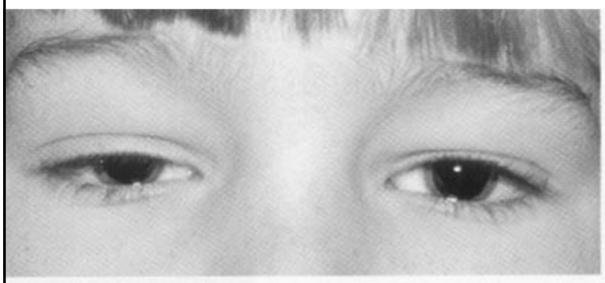

Fig. 3-7 Ptosis of the right upper lid.

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Abnormalities of the Cup

- Cupping
  - Increased pressure within the eye caused by glaucoma
  - Causes a backward depression of the disc giving the appearance that the cup is coming out at you
  - Appearance
    - Cup is enlarged (More than 1/2 the size of the disc)
    - Retinal vessels sink in and under the cup

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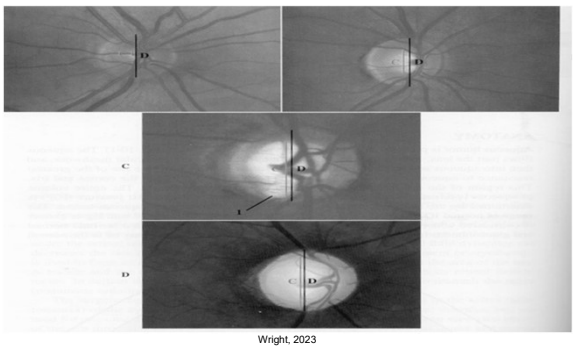
Optic Disc/Nerve Cupping



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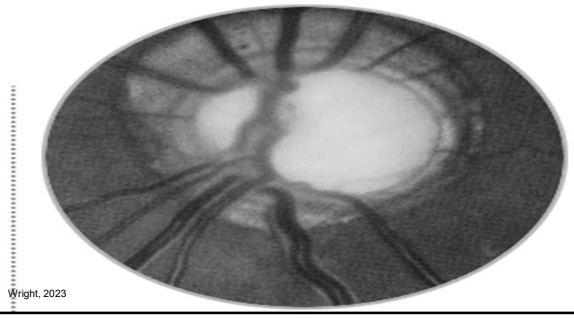
Cupping



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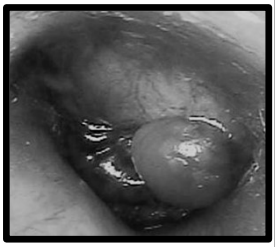
Bullous Myringitis



- More common in children; often has perforated before presentation
- Intensely painful

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Recurrent Uvulitis

- Beefy uvula
- Recurrent sore throat
- Consider sleep apnea

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Recurrent Oral Ulcers

- Check Herpes Select PCR test
- Check Uric Acid
- If herpes positive, start antiviral daily
- If herpes negative and uric acid > 6 mg/dL – start allopurinol 100 mg daily
- Warning: allopurinol
  - Renal dosing
  - Acute hypersensitivity reaction
  - African American, Han Chinese ancestry, Korean ancestry, Thai ancestry, Native Hawaiian and Pacific Islander ancestry: check HLA-B* 5801 allele

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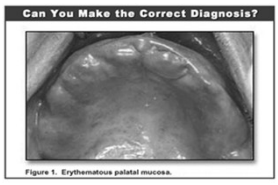

Figure 1. Erythematous palatal mucosa.

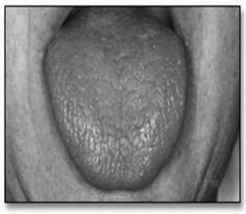
Figure 4. Erythema and atrophy of fillform papillae of the dorsal tongue.

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Pediatric Hypoventilation Syndrome

- Often overweight or obese
- Often diagnosed with ADHD
- Enuresis persistent in over 60% of children
- May have persistent daytime fatigue
- Diagnosis: Sleep study

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Peritonsillar Abscess

- Physical examination
  - May appear restless
  - Irritable
  - May lie with head hyperextended to facilitate respirations
  - Muffled or “hot potato voice”
  - Stridor may be present
  - Respiratory distress

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Peritonsillar Abscess

- Physical examination findings
  - Fiery red asymmetric swelling of one tonsil
  - Uvula is often displaced contralaterally and often forward
  - Large, tender lymphadenopathy

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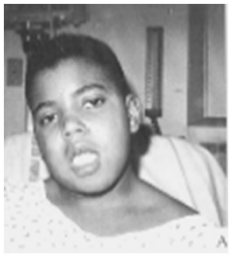
Peritonsillar Abscess



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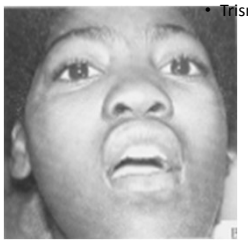
Peritonsillar Abscess

- Trismus



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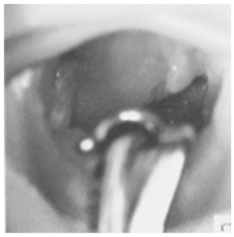
Peritonsillar Abscess



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Thyroid Nodule

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US and 24-Hour Iodine Uptake Scan

- Check TSH
  - –Cancers are metabolically neutral
- Ultrasound
  - –Helps confirm presence of nodule
- Scan:
  - –Is nodule hot or cold nodule?
- 15% of nodules – identified as “cold” nodules are malignant

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Cold Nodule

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Cardiac and Pulmonary

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Hypertensive Urgency vs. Emergency

- Urgency
  - BP ≥180/120 mm Hg
  - No TOD
  - Often asymptomatic but may have headache, SOB
  - Adjust oral medications and follow up within one to few days
- Emergency
  - BP ≥180/120 mm Hg
  - + TOD
  - IV medication indicated
  - Goal – Reduce mean arterial pressure by 25% in 1-hour
  - Monitored in ICU

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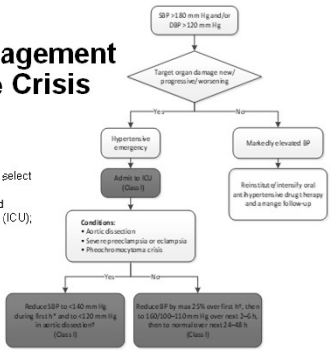
Diagnosis and Management of a Hypertensive Crisis



Colors correspond to Class of Recommendation in Table 1.
*Use drug(s) specified in Table 19.
†If other comorbidities are present, select a drug specified in Table 20.
Blood pressure (BP); diastolic blood pressure (DBP); intensive care unit (ICU); and systolic blood pressure (SBP).

Figure 26

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12 year old…

- Presents with mom for evaluation of shortness of breath during hockey
- Has noticed it more over the past few months but he is also recovering from viral URI
- VSS, Lungs clear
- Heart: S1, S2; Grade III/VI harshsystolic murmur loudest in the aortic region and left sternal border; radiating into right carotid
  - Louder with standing

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Hypertrophic Cardiomyopathy

- Most common cause of sudden cardiac death in the athlete
  - Second: Coronary Artery Abnormalities
  - Third: LVH
- A few well-known sports figures have died from this disease

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Hypertrophic Cardiomyopathy
  - –Cardiomyopathy: disease of cardiac muscle
  - –Can presents in young adulthood

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- –Septal thickening and abnormal movements of the mitral valve; Often is accompanied by outlet obstruction

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Etiology
  - –Strong genetic component: Autosomal dominant
  - –Often times, family history of individuals dying prematurely as early as in the 20's

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Clinical Symptoms
  - –DOE
  - –Often asymptomatic and die spontaneously during exercise
- Timing: Mid-systolic
- Location: Left sternal border

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Radiation: Down left sternal border; occas. carotids
- Intensity: Grade II and louder/VI

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Quality: blowing, moderately harsh
- Aids to Diagnosis
  - Decreases with squatting, hand grip
  - Increases with standing, valsalva

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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Hypertrophic Cardiomyopathy

- Associated Findings
  - Rapid upstroke of the carotid impulse

http://emedicine.medscape.com/article/152913-overview accessed 06-15-2011

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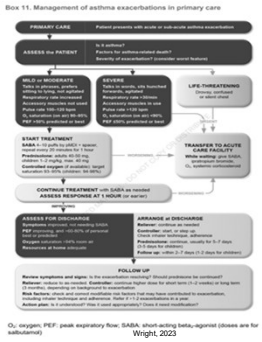
Managing Exacerbations in Primary Care

https://ginasthma.org/wp-content/uploads/2022/07/GINA-2022-Pocket-Guide-WMS.pdf accessed 01-02-2023



O_2: oxygen; PEF: peak expiratory flow; SABA: short-acting beta$_2$-agonist (doses are for salbutamol)

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GI Abnormalities

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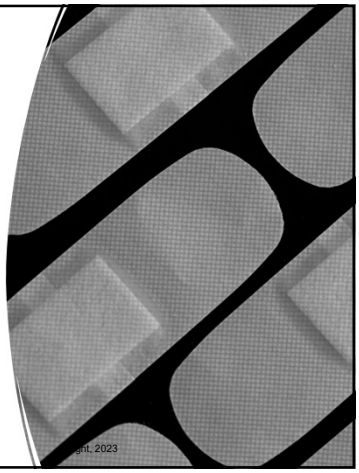
20 year old with left shoulder pain

- Kehr's Sign
  - Intense pain of the left shoulder
  - Produced with splenic rupture
  - Will reproduce pain with pressure over spleen but not by palpating left shoulder



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Mark…

Mark is a 12 yowm who presents with an 8 hour history of worsening abdominal pain. Woke him from sleep. Epigastric at onset. Now seems lower in right side of abdomen. Associated with nausea and vomiting for the past 2 hours and a temp of 100. Denies bowel changes, urinary symptoms.

Meds: none; Allergies: NKDA

What is going on with Mark?

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Appendicitis

- Mortality and morbidity rates remain high
- Perforation rates: 17-40%
  - Perforation has been known to occur within 1st 24-48 hours of the infection

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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History of a patient with appendicitis

- Careful history is the most important aspect
  - Individual is usually a teen or young adult
- Classic presentation: awakens in the night with vague periumbilical pain
  - **Worsens over the period of 4 hours**
  - **Subsides as it migrates to the RLQ**
  - **Worsened with movement, deep respirations, coughing**

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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History of a patient with Appendicitis

- Pain precedes anorexia, nausea or vomiting
  - Nausea and anorexia are very common
  - Vomiting may or may not be present
  - Question the diagnosis if patient is hungry
- Low grade fever or none at all
- Usually seek attention within 12-48 hours
- Patient will often report feeling constipated

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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Physical Examination

- Abdominal Examination
  - Tenderness at McBurney's point
    - **1/3 the distance between the anterior iliac spine and the umbilicus**
  - Guarding
    - **Contraction of the abdominal walls**
    - **Frequently present**
    - **Can be faked or induced**

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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Physical Examination

- Rigidity
  - Important predictor of appendicitis
  - Involuntary spasm of the abdominal musculature
  - Caused by peritoneal inflammation
- Markle's sign
  - Heel-drop jarring test

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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Physical Examination

- Rebound tenderness
  - Press on area above the pain
  - Suddenly withdraw fingers
- Rovsing's Sign
  - Pain felt in RLQ when examiner presses firmly in the LLQ and suddenly withdraws
- Psoas Sign
  - Patient is placed in a supine position
  - Ask patient to life thigh against your hand that you have placed above the knee

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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Physical Examination

- Obturator Sign
  - May be or may not be positive
  - Patient is positioned in supine position with the right hip and knee flexed
  - Internally rotate the right leg

http://emedicine.medscape.com/article/773895-overview accessed 06-30-2011

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Additional Diagnostic Pearls

- Gray Turner's Sign
  - Ecchymosis of the flank
  - Indicative of Extra or Intraperitoneal hemorrhage
- Cullen's sign
  - Periumbilical ecchymosis
  - Indicative of Extra or Intraperitoneal hemorrhage

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What I Wish I Had Known

- Have patient assume a "modified sit-up" on examination table
  - Palpate abdomen: if tender when abdomen is flexed - likely muscular problem
  - If tender with relaxation – deeper abdominal issue

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Neurologic Abnormalities

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AB

- 66 year old female who presents to NP complaining of:
  - Pressure in right ear x 4 hours
  - Concerned re: an ear infection as she is flying over next 48 hours
  - History of allergic rhinitis
  - Accompanied by vertigo
  - Notices that sound is “muffled in ear”

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AB (continued)

- Evaluation by NP
- Normal examination except pale, boggy turbinate's
- No evidence of AOM
- ? Slight fluid behind right TM
- Diagnosis: Serous OM
- Treatment: OTC treatment; i.e. topical nasal spray and pseudoephedrine

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AB (continued)

- Call 12 hours later….
  - Worsening hearing loss, difficulty hearing right ear
  - No pain, feels blocked
  - Concerned as she is flying
  - Seen by MD
  - Diagnosis: OME
  - P: loratadine, increased fluids, topical nasal spray

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AB (continued)

- 6 months later, letter received from specialist
- Diagnosis:
  - Sudden Sensorineural Hearing Loss (SSNHL)

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SSNHL

- Most cases occur in the morning and progress rapidly over a 12 hour period
- First presentation is often tinnitus or sense of fullness
- Peak incidence: 6th decade of life
- Most cases idiopathic
  - May be infectious, result of an acoustic neuroma
  - Trauma or drug induced
  - Occlusion of cochlear artery
- 40% accompanied by vertigo
  - Poor prognosticator

http://otologytextbook.com/sudden_sensorineural_hearing_los.htm accessed 03-08-2013

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SSNHL

- 30-65% will completely or partially recover without treatment
- Treatment:
  - Aimed at eliminating offending cause
  - Steroids
    - 10 day course of steroids
    - 40-60 mg of prednisone daily
    - 78% vs. 38% had partial/complete recovery compared with placebo
  - Vasodilator therapy

http://otologytextbook.com/sudden_sensorineural_hearing_los.htm accessed 03-08-2013

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SSNHL

- Regard SSNHL is regarded as an otologic emergency
- Refer to audiology vs. ENT acutely
- Gadolinium-enhanced MRI of the internal auditory canals should be obtained (r/o acoustic neuroma)
- A 10-day course of prednisone, 1 mg/kg/d
  - If a partial recovery is noted at the end of the 10 days, the full dose is extended another 10 days, and the cycle is repeated until no further improvement is noted.
- Additionally, acyclovir, 800 mg 5 times daily for 10 days, is prescribed because it may be beneficial and since the risks are minimal.
- A 2-g sodium diet is recommended with a hydrochlorothiazide–triamterene diuretic combination

http://otologytextbook.com/sudden_sensorineural_hearing_los.htm accessed 03-08-2013

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Signs and Symptoms of Immediate Concern

Following section adapted from: Wright, WL. 2010 Physical Assessment & Health History of the Adult Examination 9th Edition.

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Signs and Symptoms of Immediate Concern

- General
  - Fever >103 -105
  - Any toxic appearing individual
  - No eye contact with parent
  - Not consolable
  - No urination or tears in 8 hours

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Signs and Symptoms of Immediate Concern

- General
  - Infant < 3 months with a temp of 100 or >
  - Child with a weak cry
  - Child who is unable to be comforted for > 4 hours or not making eye contact with caregiver
  - No feeding in 3 tries

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Signs and Symptoms of Immediate Concern

- General
  - Change in behavior
  - Change in gait

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Signs and Symptoms of Immediate Concern

- Dermatological
  - Rashes, particularly when associated with a fever
  - Rashes described as bruising
  - Lacerations > 1/4 inches
  - Bee sting associated with paleness, sob, or wheezing
  - Animal or human bite
  - Burns

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Signs and Symptoms of Immediate Concern

- Eyes
  - Trauma
  - Pain (triad – pain, redness, and vision changes)
  - Double vision
  - Photophobia
  - Intense redness
  - Unequal pupils
  - Foreign body in the eye

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Signs and Symptoms of Immediate Concern

- Ears
  - Intense pain
  - Discharge from the ear
  - Foul smelling odor
  - Pain, followed by sudden relief and discharge
  - Sudden loss of hearing

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Signs and Symptoms of Immediate Concern

- Nose
  - Bloody nose that does not stop for 20 minutes
  - Foul discharge from one side only
  - Extensive redness on the face, particularly around nose

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Signs and Symptoms of Immediate Concern

- Mouth
  - Trouble swallowing
  - Sore throat with fever and/or exudate
  - Drooling from the mouth
  - Sore throat with a rash
  - Toxic appearing individual with sore throat

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Signs and Symptoms of Immediate Concern

- Pulmonary
  - Shortness of breath
  - Wheezing
  - Cough productive of bloody sputum
  - Cough associated with drooling
  - Bluish color to lips
  - Sitting up and leaning forward to breathe
  - Pain with inspiration

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Signs and Symptoms of Immediate Concern

- Pulmonary
  - Flaring nostrils
  - Retracting or heaving chest
  - Constant cough > q 5 minutes
  - Any individual with a peak flow of 50% or less than predicted

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Signs and Symptoms of Immediate Concern

- Pulmonary
  - Any child with labored breathing
  - Any child who has a barky, croupy cough but does not respond to 15 minutes of steam

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Symptoms of Immediate Concern

- Cardiac
  - Chest pain, particularly if associated with shortness of breath or radiation
  - Associated diaphoresis
  - Irregular heart beat, particularly if associated with sob or dizziness
  - Bilateral pitting edema associated with weight gain, sob or chest pain
  - Orthopnea
  - PND

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Signs and Symptoms of Immediate Concern

- Peripheral Vascular
  - Tender, swollen calf
  - One cold foot

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Signs and Symptoms of Immediate Concern

- Abdominal
  - Fever with abdominal pain
  - Trauma
  - Abdominal pain
  - Abdominal pain that began in epigastric region and has moved to the RLQ
  - Bloody vomitus or diarrhea

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Symptoms of Immediate Concern

- Abdominal
  - Vomiting associated with neurological changes
  - Black or bloody stools

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Signs and Symptoms of Immediate Concern

- Musculoskeletal
  - Fall from a height and localized bone pain
  - Obvious deformity of any bone
  - Back pain associated with loss of bowel or bladder control
  - Neck pain with numbness/tingling in arms or body

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Signs and Symptoms of Immediate Concern

- Gynecological/Urinary
  - Urinary symptoms of dysuria, frequency, or urgency
  - Back pain with associated urinary symptoms
  - Hematuria
  - Vaginal bleeding of 1 pad or > per hour

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Signs and Symptoms of Immediate Concern

- Gynecological/Urinary
  - Bloody vaginal discharge
  - Bleeding associated with a positive pregnancy test
  - Severe dyspareunia; particularly with deep movement

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Signs and Symptoms of Immediate Concern

- Gynecological/Urinary
  - –New wetting in a child

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Signs and Symptoms of Immediate Concern

- Neurological
  - –Headache after trauma
  - –Headache associated with neurological changes
  - –Headache associated with fever
  - –Altered consciousness and lethargy

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Signs and Symptoms of Immediate Concern

- Neurological
  - –Blood coming from an ear or bruising behind ear, especially after trauma
  - –Numbness on one side of the body
  - –New onset of headaches in individual over age 50
  - –New facial asymmetry

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Signs and Symptoms of Immediate Concern

- Endocrine
  - Urinary frequency with polydipsia, polyphagia, and weight loss
  - Rapid breathing associated with any of the above symptoms

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Signs and Symptoms of Immediate Concern

- Psychological
  - Suicidal ideations (ask if plan)
  - History of suicide attempt and now with suicidal ideations

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