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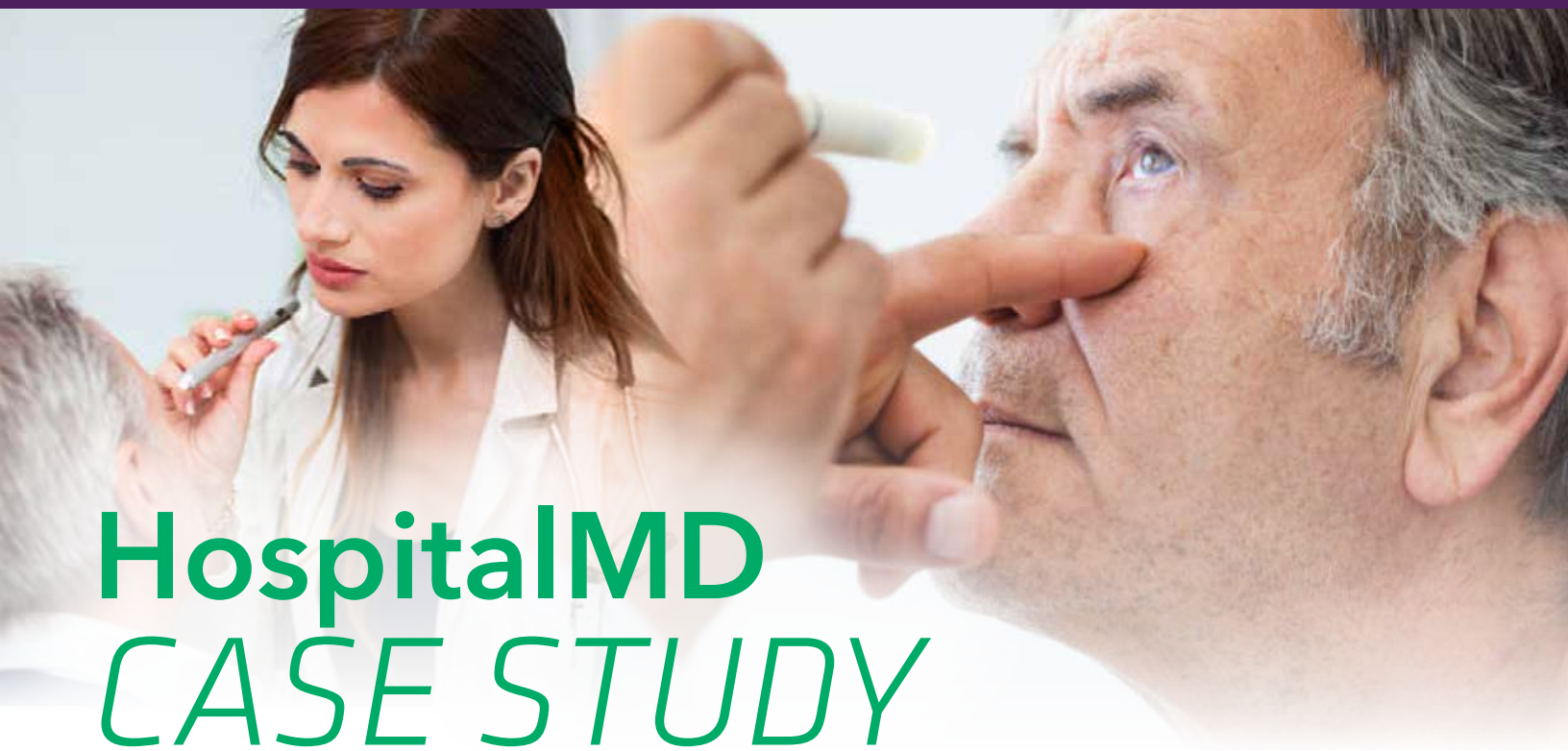
HospitalMD®

EMERGENCY | HOSPITALIST | HYBRID

insight™

CLINICAL EDITION FOR SMALL COMMUNITY HOSPITALS



HospitalMD *CASE STUDY*

THE CASE: A 73-year-old male presents to the ED for reports of decreased vision in the left eye. The patient states that he has had some floaters for "a while" and a cob-web like view for a couple of weeks and that his vision in the left eye decreased markedly 2 weeks PTA. His wife states that his vision "is terrible" and that he runs into things and cannot see her coming up beside him on the left side. He has no reports of pain or other symptoms and he believes that his "cataracts are back" but that his wife insisted that he come be checked out.

Based on actual cases that HospitalMD providers have seen. However, details about the case, patient and outcomes have been modified in order to protect patient privacy.

From the Editor: Welcome to this installment of **HospitalMD insight™–Clinical Edition**! This publication is aimed to inspire and equip you to advance clinical excellence in your community hospital. I would love to hear your feedback, comments, suggestions and accolades. Please email me with any thoughts at: BNewberry@HospitalMD.com.

BRITTANY NEWBERRY, PhD, MSN, MPH, APRN, FNP-BC, ENP-BC
Board Certified Family and Emergency Nurse Practitioner,
Vice President Education and Provider Development, HospitalMD

Editorial Team:
Brittany Newberry, PhD, ENP-BC – Editor
Jim Burnette – CEO, Editor-in-Chief
Jim Blake MD, Jim DeSantis, MD – Consulting Editors

History: HTN, GERD, DM, Cataracts (surgical removal 8 years PTA bilaterally)

Meds: Lisinopril 20mg PO Daily, Prevacid 20mg PO qAM, Metformin 500mg PO BID

VS: HR – 72, BP – 138/88, RR – 18, T – 98.2 °F, POx – 99% on RA

EXAM: HEENT: Normocephalic and atraumatic, no nasal discharge, oropharynx clear, uvula midline, TMs intact bilaterally, Visual acuity OD 20/30 and only shadows OS. EOMs intact bilaterally, no ocular discharge, erythema or FB noted. No gross abnormalities noted on ophthalmoscopy. Fluorescein stain negative. All other systems WNL.

Labs: None

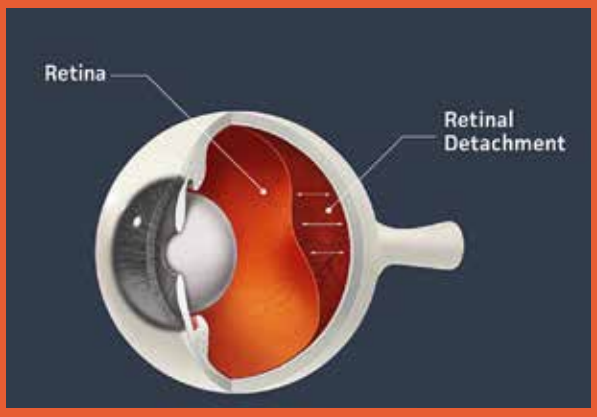
Imaging: None

Treatment: None

Diagnosis: Suspected retinal detachment

Disposition: The provider contacted an ophthalmologist three towns over who agreed to see the patient urgently in the clinic. If this option had not been available, the patient would have been transferred via POV to the nearest tertiary care center. The wife agreed to take the patient to ophthalmology and verbalized her understanding of the importance of immediate follow-up.

The Outcome: Unknown



TAKE AWAYS:

- **Try to get patients into specialty clinic appointments near where they live if possible and ED care via transfer is not required.**
- **Had this been an acute issue, the provider would have more strongly considered transfer in anticipation of urgent surgical intervention.**
- **A patient with a retinal detachment may have a nearly normal ophthalmoscopy exam.**
- **Ocular ultrasound can be used to detect retinal detachment by a trained provider**

CUSTOMER SERVICE TIPS:

- **Provide education to the family about appropriate evaluation and treatment options.**
- **Provide education to come to the ED for any acute visual change in the future.**
- **Explain the warning signs that should prompt a return to the ED.**
- **Encourage immediate follow up with ophthalmology.**
- **Provide patient with name, address, directions and phone number for the ophthalmologist he will be seeing.**

HOW COMFORTABLE ARE YOU ASSESSING OCULAR INJURIES?

Ocular injuries can be a challenge to assess and treat in the rural ED environment. How do you do a thorough eye assessment? What elements should always be documented? How do you know when to treat and street, send for follow-up or transfer to a tertiary care facility? Certainly, any threat to loss of vision should be treated with urgency. Referral to a tertiary facility for ocular injury is sometimes very appropriate! Do not put yourself at risk by trusting that patients will be able to follow up for serious eye injuries. What are some of the vision threatening conditions that CANNOT be missed in the ED? This month's issue will focus on severe or vision threatening conditions and next month's issue will focus on more commonly seen eye conditions.

First, let's talk about what constitutes a thorough eye exam. These elements should be assessed and documented for every ocular complaint unless otherwise noted.

The Exam

- **Visual acuity** – This is the "vital sign" of the eye. This should be assessed prior to any other intervention if possible. Be sure to document visual acuity in both eyes individually and together. **DO NOT assess visual acuity for chemical burns, penetrating foreign bodies to the eye or globe rupture**.

- **Inspection** – Inspect the eyes prior to any additional testing. Be sure to look at both eyes, even if the complaint is only with one. Inspect for any gross abnormalities, discharge, redness or injury, Evert the eyelids using a Q-tip and inspect under the lids. Check pupillary response bilaterally.

- Assess **extraocular movements** and **visual fields**.

- **Ophthalmoscope exam** – Examine the posterior eye structures such as the fundus and optic disc. You can learn more about this on **UpToDate.**

- **Slit lamp inspection** – This is standard of care in the ED if your ED has a slit lamp.

- **Woods lamp inspection** – If there is no slit lamp, you can utilize fluorescein stain and a woods lamp to inspect for any surface abnormalities on the cornea.

- **Tonometry** – (If available) check the pressure in both eyes following the manufacturers recommendations based on the unit that is available in your ED.

Conditions

Chemical Burns

Any type of chemical to the eye requires immediate attention and irrigation. Prolonged contact with chemicals in the eye can cause permanent, irreversible blindness. Immediate irrigation should be initiated. Alkali burns tend to be worse that acid burns and longer exposures do more damage than short. Be sure to try and get the exact description of the product that was being used and call poison control for specific advice. Irrigation can be achieved manually, with a Morgan lens, IV tubing or with a modified nasal cannula. A chemical burn should be irrigated with at least one liter of water or saline. Check the pH after that and then again, every 30 minutes until pH returns to normal (6.5 - 7.5). This typically takes 30-60 minutes but may take 2 hours or even longer. Irrigation should be done gently if concomitant globe rupture is suspected. Immediate ophthalmologic consultation is required for ANY significant chemical exposure.

See **UpToDate** for specific information on chemical burns.

Ocular compartment syndrome (OCS)

This condition was formerly known as retrobulbar hematoma. This can occur after ocular trauma and is a true medical emergency. Trauma and intraorbital hemorrhage can cause intraorbital pressure to rapidly elevate. This pressure compresses the eye and optic nerve causing ischemia. Signs of OCS include:

- Markedly decreased visual acuity
- An afferent pupillary defect
- Proptosis
- Diffuse subconjunctival hemorrhage
- Evidence of increased intraorbital pressure
- Periorbital ecchymosis
- Restricted extraocular movements
- Chemosis
- Conjunctival vessel congestion
- Vascular and optic disc edema
- Increased intraocular pressure
- Abnormal color vision

OCS is a true ophthalmologic emergency that requires lateral canthotomy to decompress the orbit. See this procedure **HERE.** This procedure should **not** be delayed for diagnostic imaging. This procedure should be performed by the ED provider or the provider with the most experience if an ophthalmologist is **not** immediately available. Once performed, consult ophthalmology for imaging and/or transfer.

Additional management of OCS should involve ophthalmology but generally includes:

- Elevation of the head of the bed to at least 45 degrees
- Management of increased intraocular pressure as for acute angle closure glaucoma
- Pain control (parenteral opioids are frequently required)
- Correction of any coagulopathy and/or cessation of anticoagulant therapy
- Management of elevated blood pressure
- Prevention of sudden increased intraorbital pressure by means of the following measures:

- Cough suppression
- Antiemetic Therapy
- Stool softeners

For more information on OCS, see **UpToDate**.

Global Rupture

Exam findings for globe rupture include:

- Markedly decreased visual acuity
- Relative afferent pupillary defect
- Eccentric or teardrop pupil
- Increased anterior chamber depth
- Extrusion of vitreous
- External prolapse of the uvea (iris, ciliary body, or choroid) or other internal ocular structures
- Tenting of the cornea or sclera at the site of globe puncture
- Low intraocular pressure (checked by an ophthalmologist only)
- Seidel sign

Any patient with a suspected globe rupture should be emergently referred to ophthalmology.

- **Avoid** any examination procedure that might apply pressure to the eyeball
- **Avoid** placing any medication or diagnostic eye drops into the eye
- **Do not** remove any protruding foreign bodies

For more information on globe rupture see **UpToDate**.

Traumatic hyphema

A hyphema appears as a layering of red blood cells in the anterior chamber. This may be grossly apparent on visual inspection, especially with the patient in a sitting position. In patients with this condition, be sure to evaluate for any other trauma, treat accordingly and watch for OCS or increasing orbital pressure due to bleeding in the eye. Patients with a hyphema may also have:

- Photophobia
- Decreased visual acuity
- Anisocoria
- Iridodialysis (tearing of the iris away from its insertion)
- Increased intraocular pressure

Patients with a traumatic hyphema should have ophthalmology consultation and potential transfer or follow-up based on the consultation recommendations. Generally, recommendations include:

- Placement of an eye shield
- Serial measurement of intraocular pressure
- Bed rest and dim lighting
- Elevation of the head of the bed to at least 30 degrees
- Pain control
- Control of nausea and vomiting

- Dilating eye drops for patients without narrow angle glaucoma or open globe injury
- Correction of any coagulopathy

You can learn more about traumatic hyphemas on UpToDate **HERE** and **HERE**.

Traumatic vitreous hemorrhage

Traumatic vitreous hemorrhage may indicate a retinal tear or detachment and is also associated with abusive head trauma in infants and children and subarachnoid or subdural hemorrhage in patients with significant head trauma. Patients with this finding should have an emergent head CT and consultation with ophthalmology in addition to any other necessary consults and/or transfer.

Patients may report:
- Decreased or hazy vision
- Black spots
- Cob webs

Ophthalmoscopic exam findings may include:
- Partial or complete obscuring of the optic disc, retina, or vessels
- Absent red reflex

You can find more in-depth information about traumatic vitreous hemorrhage on **UpToDate**.

Retinal trauma

Retinal injuries may result partial or complete visual loss. Retinal hemorrhage, tears, or detachment may be evident on ophthalmoscopy. However, urgent examination by an ophthalmologist is essential for full characterization of a retinal injury.

Specific retinal injuries and potential interventions include:

- **Acute retinal break** – The patient may report light flashes, floaters, or spots. This full thickness defect is usually seen peripherally and may cause a visual field deficit. This patient may require laser therapy or cryotherapy within 24 to 72 hours of injury.
- **Retinal detachment** – The patient may report light flashes, floaters, visual disruption (shadow or "like a curtain being pulled down"), visual field deficit, and loss of peripheral and/or central vision. Patients with acute retinal detachment require bed rest and potential urgent surgical repair.
- **Purtscher retinopathy** – Purtscher retinopathy presents with sudden decreased vision with superficial retinal hemorrhages or cotton wool spots encircling the optic nerve in patients with traumatic compression of the legs, chest, or head without direct eye injury. Retinal changes are typically bilateral. Management consists of care of compressive injuries and no specific eye treatment. Ophthalmologic consultation is indicated.
- **Commotio retinae** – This is retinal edema after blunt, closed globe injury. It may be asymptomatic or cause decreased vision. Ophthalmoscopy demonstrates retinal whitening with normal vessels with potential retinal hemorrhage his injury typically resolves without intervention; however, ophthalmology consultation is often necessary.

You can learn more about retinal trauma on **UpToDate**.

Optic nerve injury

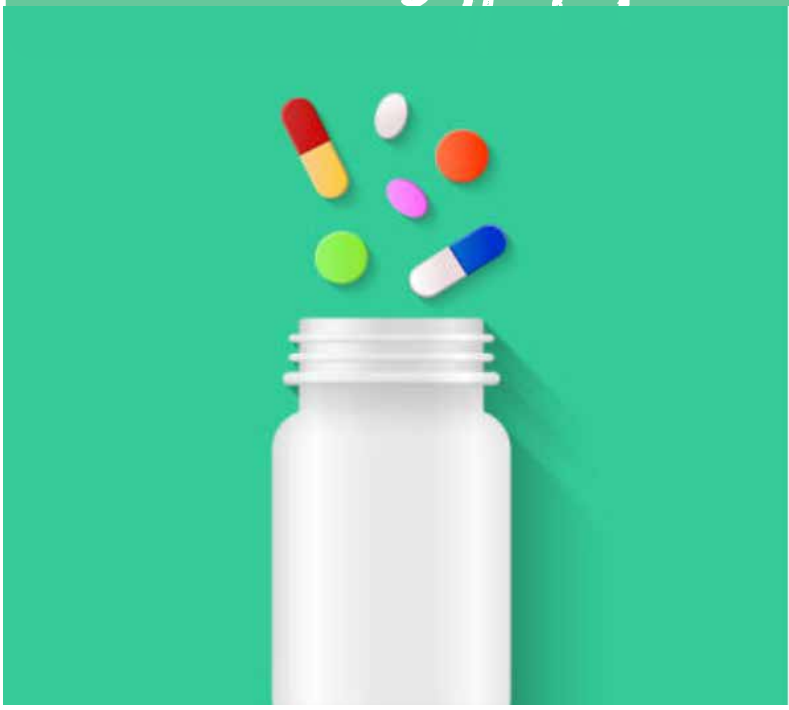
Optic nerve injury (AKA traumatic optic neuropathy) causes decreased vision and often a desaturation of the color red or decreased color vision in general in the affected eye. There can also be an associated afferent pupillary defect. These traumatic injuries typically occur in one of the following manners:

- Direct optic nerve injury - usually results from lacerating trauma to the orbit. The nerve may be contused or avulsed. The optic nerve rarely may be directly injured by a needle puncture during ophthalmic surgery or by hemorrhage within the orbit.
- Indirect optic nerve injury (much more common) - results from contusion of the nerve within the optic canal. The usual cause is head trauma. The optic nerve can become bruised during a concussion resulting in shearing of the optic nerve. Although less likely, abusive head trauma is an important consideration in infants who do not have a known history of significant head trauma.

These cases should have ophthalmology consultation for imaging, treatment and follow-up. Follow ophthalmology/trauma/peds recommendations regarding transfer.

You can learn more about optic nerve injury on UpToDate.

2019 MIPS Update



Each year, Medicare requires us to choose from a list of improvements for one that will be implemented in our sites. There is financial penalty involved with not attesting to at least one improvement. I try to select an improvement that is both relevant and useful for our clinicians (and ultimately patients) and isn't too cumbersome. The MIPS goal that we have chosen for 2019 is:

IA_PSPA_6 - Consultation of the Prescription Drug Monitoring Program

Clinicians would attest to reviewing the patients' history of controlled substance prescription using state prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. For the

transition year, clinicians would attest to 60 percent review of applicable patient's history. For the Quality Payment Program Year 2 and future years, clinicians would attest to 75 percent review of applicable patient's history performance.

Whenever writing a narcotic or benzodiazepine prescription for longer than 3 days of medication, please be sure to check your local drug database and DOCUMENT that you reviewed the patient's account prior to prescribing these drugs. For the MOST part, we should be writing very short courses (1-3 days) of these drugs, if we write for them at all. Patients should have these drugs prescribed and managed by their primary care provider in an effort to improve patient safety around these medications.

NEED STROKE AND/OR TRAUMA CME?

If you work at a facility that is a designated stroke or trauma center, you have a requirement for a certain number of CME each year on these topics. These requirements are EACH YEAR. Make sure you are keeping up with these requirements AND forwarding your CME certificates to me (Brittany) and Pam Callahan so that we can track this CME and have it available for facility re-certification requirements. Regardless of whether or not your facility is a designated stroke or trauma center, these CMEs are beneficial. The CME certificate will specifically designate stroke/trauma CME in most cases. If not, a stroke/trauma specific topic will suffice. Below are some ways that you can obtain these CMEs. There are lots of ways to obtain these CMEs, below are just a few examples.

CME DEADLINE WAS SEPT 30TH.

The deadline for MCHD providers to turn in their trauma CME's was 9/30. If you haven't turned it in yet, please complete and send.

STROKE

Requirement: 3 CMEs **annually** (4 CME annually for medical directors)

EB Medicine "Emergency Stroke Care Series: Advances and Controversies"
- Cost: $179
- CME: 8 hours

American Heart Association "Acute Stroke Online Module"
- Cost: $27.50
- CME: 1.5 hours

National Stroke Association "Stroke Rapid Response Training"
- Cost: $20
- CME: 2 hours

NIH Stroke Scale Training
- Cost: Free
- CME: 3 hours
- Look for APEX NIH Stroke Scale Training in HealthStream on your To Do list

TRAUMA

Requirement: 9 CMEs **annually**

ATLS
- Cost: Varies but usually around $800-900
- CME: 17 (please note you can only count this to satisfy the requirement for one year even though your certification is for 4 – so this covers you in the calendar year that the course is taken)

Advanced Emergency Medicine Bootcamp
- Cost: $475
- CME: 2 Trauma CME (even though the entire course offers 23 CME in its entirety)

EM Crit – Trauma Compilation I
- Cost: $79.00 (includes 2 years' worth of access)
- CME: 16

EB Medicine
- Can mix and match topics that have trauma CME designated credits HERE and you can purchase each 4 hour course and CME test as a bundle for $49
- EB Medicine also has an 18 hour trauma course – Emergency Trauma Care: Current Topics and Controversies volume III – available for $249

DO YOU KNOW HOW TO ACCESS YOUR UPTODATE CME?

Did you know that UpToDate gives you CME credit for every subject that you review? It is easy to obtain a record of your completed CME with UpToDate!

- Sign into your personal UpToDate account (this won't work with a generic "site" login).
- In the upper right hand corner you will see a link for "CME".
- Click on this link.
- Click "Redeem" to redeem your CME (credits are available for 2 years).
- Click on "50 Credits".
- Place a checkbox next to the credits you would like to redeem and click "Continue" at the bottom.
- Answer the appropriate questions.
- Click "Next".
- Answer the additional questions.
- Click "Save".
- Click "Download" next to your certificate to view and/or save.

Documentation Reminders

- **HPI** – Strive to always include **FOUR HPI** elements in your charts.
- **ROS** – Document the necessary elements in the ROS and then write or check "**ALL OTHER SYSTEMS REVIEWED AND ARE NEGATIVE**". This statement must be present, and the wording MUST BE PRECISE in order to be considered acceptable by the billing company.
- **EXAM** – You must have **EIGHT** exam elements present for a higher level chart.
- **ECG/RADIOLOGY INTERPRETATION** – If you have ordered either of these, the statement "interpreted by me" must be present in the chart. **An ECG must have 3 elements and an interpretation documented and a radiology result must have an interpretation documented**.
- **CRITICAL CARE TIME** – If your patient qualifies for critical care, BE SURE to document this on the chart.
- **PROCEDURES** – Be sure to include all pertinent details regarding procedures so that any more complex procedures (ie intermediate vs simple suture repair) can be billed at the rate that matches the true complexity of the procedure.

If you have ANY questions about the documentation of any of these things, or any other types of documentation, please don't hesitate to contact your medical director or myself – bnewberry@hospitalmd.com.

DOCUMENTATION TIPS

General Concept – Laterality

ICD-10 asks for Left/Right/Bilateral laterality to be documented for many common ED dx codes including but not limited to the following (we recommend documenting laterality whenever possible):

- DVT
- Orthopedics
- Abdominal pain
- Back pain
- Lacerations, abcesses and cellulitis
- Insect bites
- Eye/ear injuries/complaints

General Concept – Acute vs. Chronic

Many ICD10 codes are requiring acute or chronic or they will default to unspecified. Document acute or chronic when applicable, especially with:

- Pain
- Bronchitis
- Asthma
- Vaginitis, vulvitis
- Congestive heart failure – acute, chronic or acute on chronic
- Arrhythmia/dysrhythmia
- Pharyngitis, URI
- Pancreatitis

Allergic Reaction

- Specify type of reaction – contact dermatitis (general or local), dermatitis, anaphylactic, allergic rhinitis, allergic gastroenteritis, allergic diarrhea, hay fever
- Also specify "due to _____" such as type of food/ingested food, contact with food, animal, ingested medicines, seasonal
- Specified codes include:
    - allergic contact dermatitis due to ____,
    - irritant contact dermatitis due to _____,
    - general dermatitis due to drugs and medicine/localized dermatitis due to drugs and medicaments taken
    - dermatitis due to ingested food,
    - anaphylactic reaction due to ____;
    - hay fever
    - allergic rhinitis due to pollen or due to food or seasonal or due to animal
    - allergic gastroenteritis, allergic diarrhea

A Fib

- Document paroxysmal, persistent, chronic, typical, atypical

Appendicitis

- "Appendicitis" is an unspecified code
- Document "Acute appendicitis with perforation or rupture" or "Acute appendicitis without perforation or rupture" when applicable

Anxiety/Suicidal Ideation

- Include symptoms to support medical necessity of the visit
- Include Signs and Symptoms: Common symptoms include shortness of breath, tachycardia, chest pain

- Document any history of depression or mental illness (specify illness type)

Asthma -*practitioners may not have this detail available but please include if applicable:

- Include Type and Status: Example, "moderate persistent with status asthmaticus"
    - *Document Type*
        - Mild intermittent
        - Mild Persistent
        - Moderate Persistent
        - Severe Persistent
    - Document Status
        - Uncomplicated
        - With acute exacerbation
        - With status asthmaticus

Convulsions – Epileptic

- if seizure - specify epileptic or non-epileptic
- if non-epileptic was seizure febrile, post traumatic, hysterical, autonomic

Diabetes

- Type 1, 2 or Gestational (there are different codes for each, this is very important)
- Manifestation – Ketoacidosis, hyperglycemia, hypoglycemia, neuropathy, gastroparesis, skin ulcers
- Ulcers – if ulcer present, document location and laterality
- Uncontrolled diabetes is no longer a concept in ICD-10. Diabetes that is poorly controlled should include a description whether hyperglycemia or hypoglycemia is present.

Dorsalgia / Back Pain

Specify location- examples:

- Lumbago and specify w/wo Left or Right sided sciatica, low back pain or cervicalgia
- Thoracic spine pain
- Intervertebral disc disorder
- If none of the above, document if strain of muscle fascia, tendon or if laceration, crushing, contusion

Resources

ANNUAL HEALTHSTREAM EDUCATION DEADLINE HAS PASSED!!!!

Have you completed your HealthStream annual education? This education was due on April 30th. If you have not completed this, please get this done ASAP. It is very important that we have documentation of annual training on compliance topics such as EMTALA, restraint use and corporate compliance.

GET ACEP NOW

ACEP Now is a great publication that works to keep all of us working in Emergency Medicine up to date on clinical and political topics. Go to this link to look at the latest issue and subscribe!

Need an ECG or Imaging Refresher?

The Center for Medical Education has an excellent online course for ECG and imaging interpretation! These two courses are completely online, earn you CMEs and are reasonably priced at $115 each. You can find links for each course below. I HIGHLY recommend these courses! They are very informative and well done.

Advanced Emergency Medicine Bootcamp: ECG Interpretation (3.75 CMEs)

Advanced Emergency Medicine Bootcamp: Imaging Interpretation (4 CMEs)

Upcoming Conferences

ACEP Calendar of Emergency Medicine Conferences

Calendar of Hospital Medicine Conferences

AAENP Conference Events

Online Education

Emergency Medicine Boot Camp

Hospital Medicine Boot Camp

Procedure Training

Global Training Institute

Emergency Procedures Course

Certification Reviews

Fitzgerald ENP Certification Review

Rosh ENP Certification Review

Journals and Professional Organizations

FREE! **Emergency Medicine News**

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Emergency Medicine Practice

Advanced Emergency Nursing Journal

Annals of Emergency Medicine

Journal of Hospital Medicine

Society of Hospital Medicine

American College of Emergency Physicians

American Academy of Nurse Practitioners

American Academy of Emergency Nurse Practitioners

American Academy of Physician Assistants

Podcasts

EM: Rap

EMCRIT

FOAMCast

REBELEM

EMplify

Hospital and Internal Medicine Podcast

The Hospitalist Podcast

If you have a great resource you would like added to this list, let us know!

CARING FOR OUR COMMUNITY.

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HospitalMD.com

DELIVERING EXCELLENCE. EVERY TIME.

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