

Fowler's

***“Truths of
Emergency Medicine”***

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1. We have two responsibilities in emergency medicine:

(1) Is there an emergency present?

Corollary, is it a life-threatening emergency, and

(2) What is the best diagnosis you can make?

LAMBDA, J.
> 3099988
DOB: 1986-01-01
004-05-22
06:15:43
No.17



IT: 0
P:
L: 1.5
M: VDP 320H80CC



IT: 0
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L: 1.5
M: VDP 320H80CC

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IT: 0
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SL: 1.5
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W: 4000



IT: 0
SP:
SL: 1.5
C: 400 CH: VDP 320H80CC

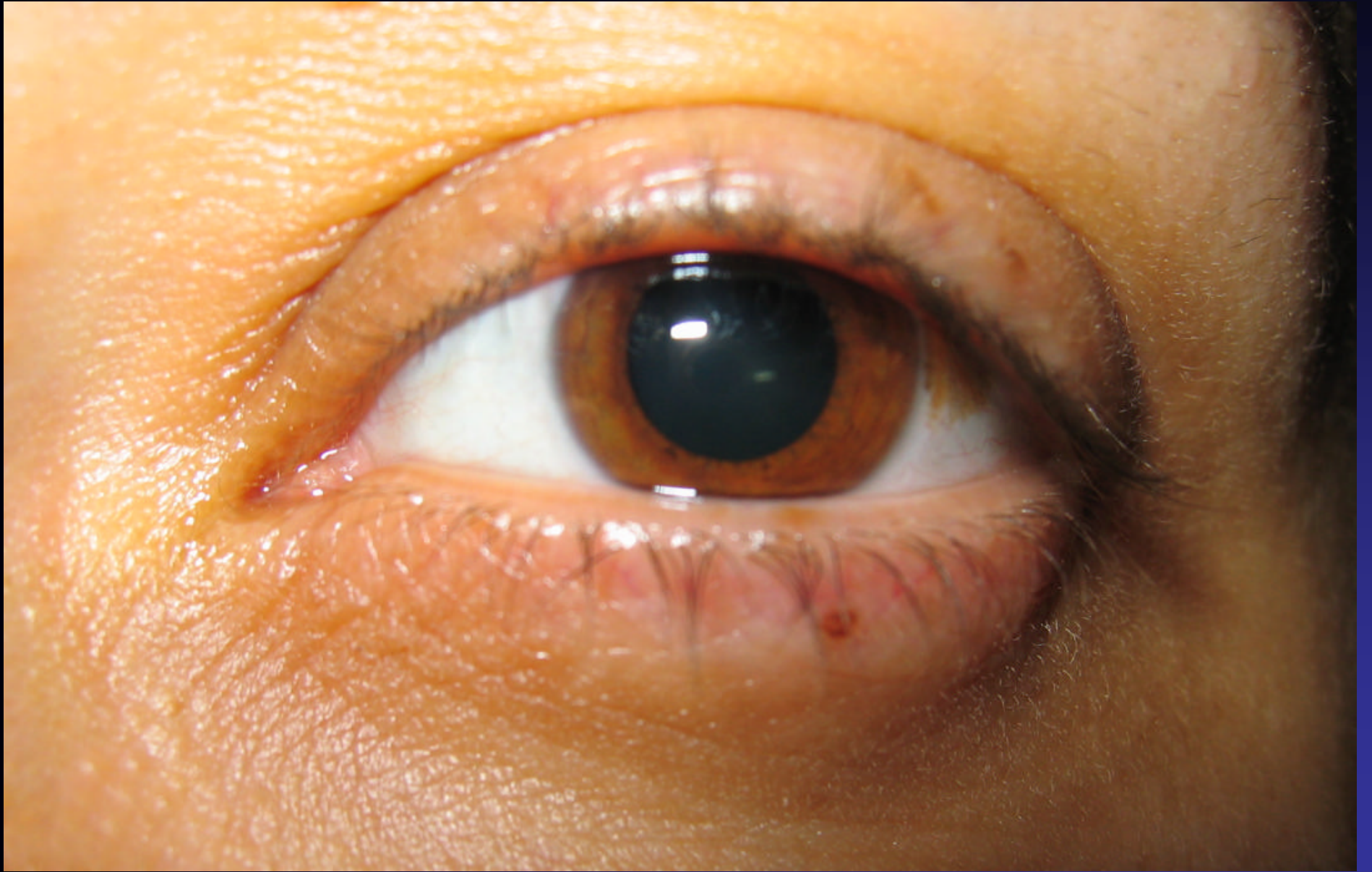
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LAMBDA, J.
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DOB: 1986-01-01
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No.18

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> 3099988
DOB: 1986-01-01
004-05-22
06:15:43
No.18



**2. Find out what the
REAL emergency is**



**3. Be a fierce advocate
for the needs
of your patient**



**4. A patient with
a painful condition
HAS a painful condition
until proven otherwise....**

***....and failure to
treat pain appropriately
is mal-treatment***



**5. When in doubt,
take more history....**

History Taking:

This seems to be a
“lost black art” for
so many medical providers

What happened?

When?

LOC?

Major system symptoms?

Co-morbid conditions?

Above all: RISK???



We are, after all,
a specialty:









**The difference between
a “specialist” and a
“generalist” is in the
RIGOR of the application
of a differential diagnosis**

**6. DEVELOP a
physical exam
that you trust,
and ALWAYS do it**



**Assessment skills
are NOT
genetically
acquired**

**The “art” of medicine
is missing from
so many practitioners....**

**...are they not looking,
or have they lost interest?**

Approaching the Patient



“See what you see!”



***“People look, but they
don't see”***

...A. Fowler, Jr.

Alertness?

Level of distress?

Noises?

Respirations?

The pulse rate?

Skin?

Obvious things (bleeding)





**Part of excellence
is performing
superior medical
histories and
physical exams**

**Elements of our
primary and secondary
surveys are often
jumbled or
forgotten**

Primary Survey

LOC/Airway/Spine

Respiratory Rate and Labor

Pulses, Neck and Wrist

Skin CMT/CRT

Neck appearance, NVD, Trachea

Chest appearance

Breath sounds present and equal

Brief exam of abd, pelvis, LE, UE, Back

Secondary Survey

Head

Neck

Chest/CV

Abd

Pelvis

Extr

Back

Third Survey

LOC

Airway

Breathing: R & Q

Circulation: Pulse, BP, CMT/CRT

*...and any other pertinent
positive or negative identified
in the primary or secondary*

Blood pressure =



**(Cardiac output) x
(Volume) x
(Peripheral resistance)**

Signs of Shock

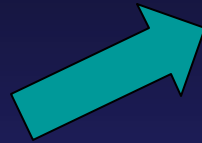
Early →
(compensated)

Weak, thirsty, lightheaded
Pale, then sweaty
Tachycardia
Tachypnea
Diminished urinary output

Late →
(decompensated)

Hypotension
Altered LOC
Cardiac arrest
Death

Shock



Cardiogenic

Rapid pulse
Distended neck veins
Cyanosis



Volume Loss

Rapid pulse
Flat neck veins
Pale



Vasodilatory

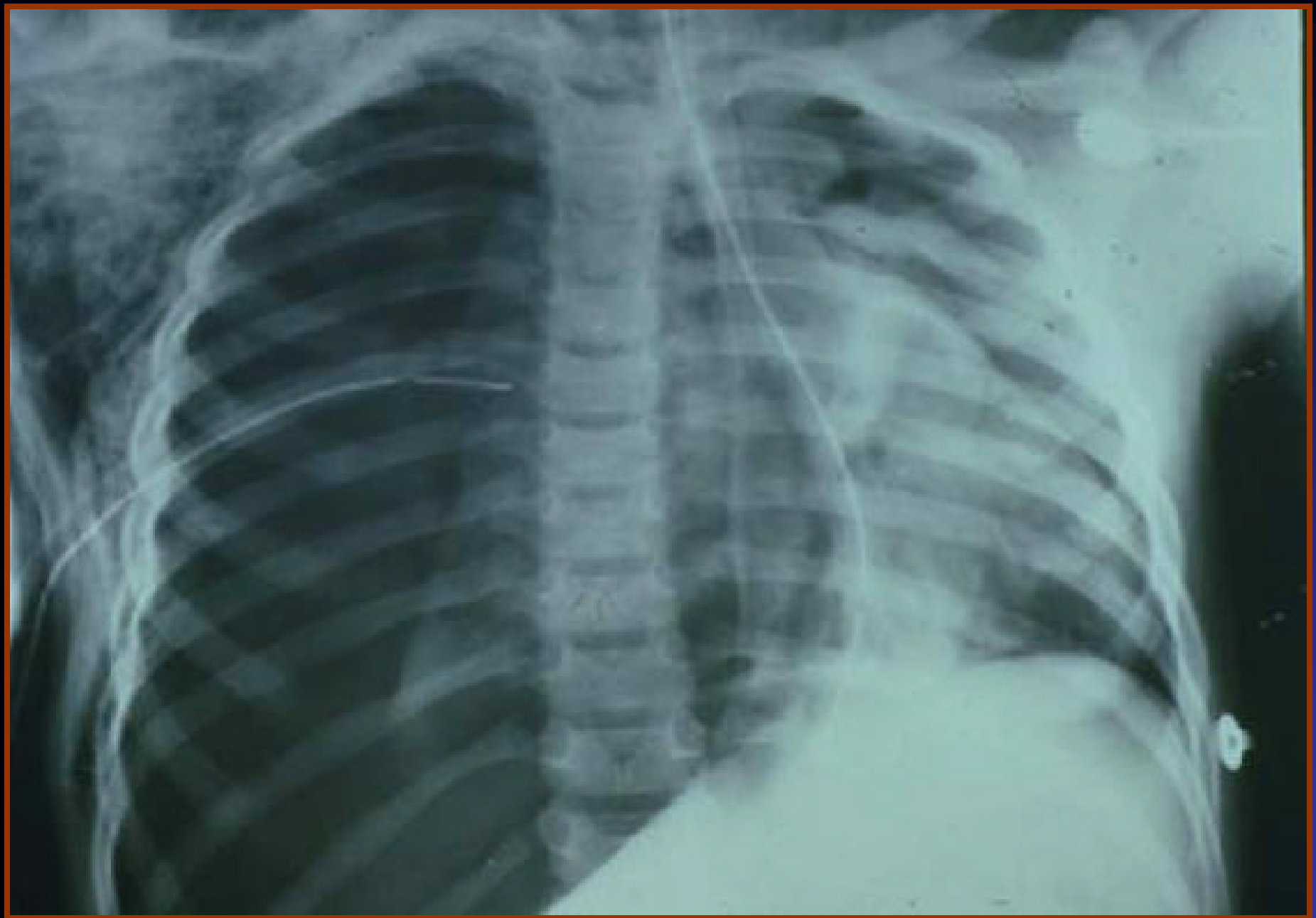
Variable pulse
Flat neck veins
Pale or pink

**If you don't
look for cyanosis,
you won't see it**

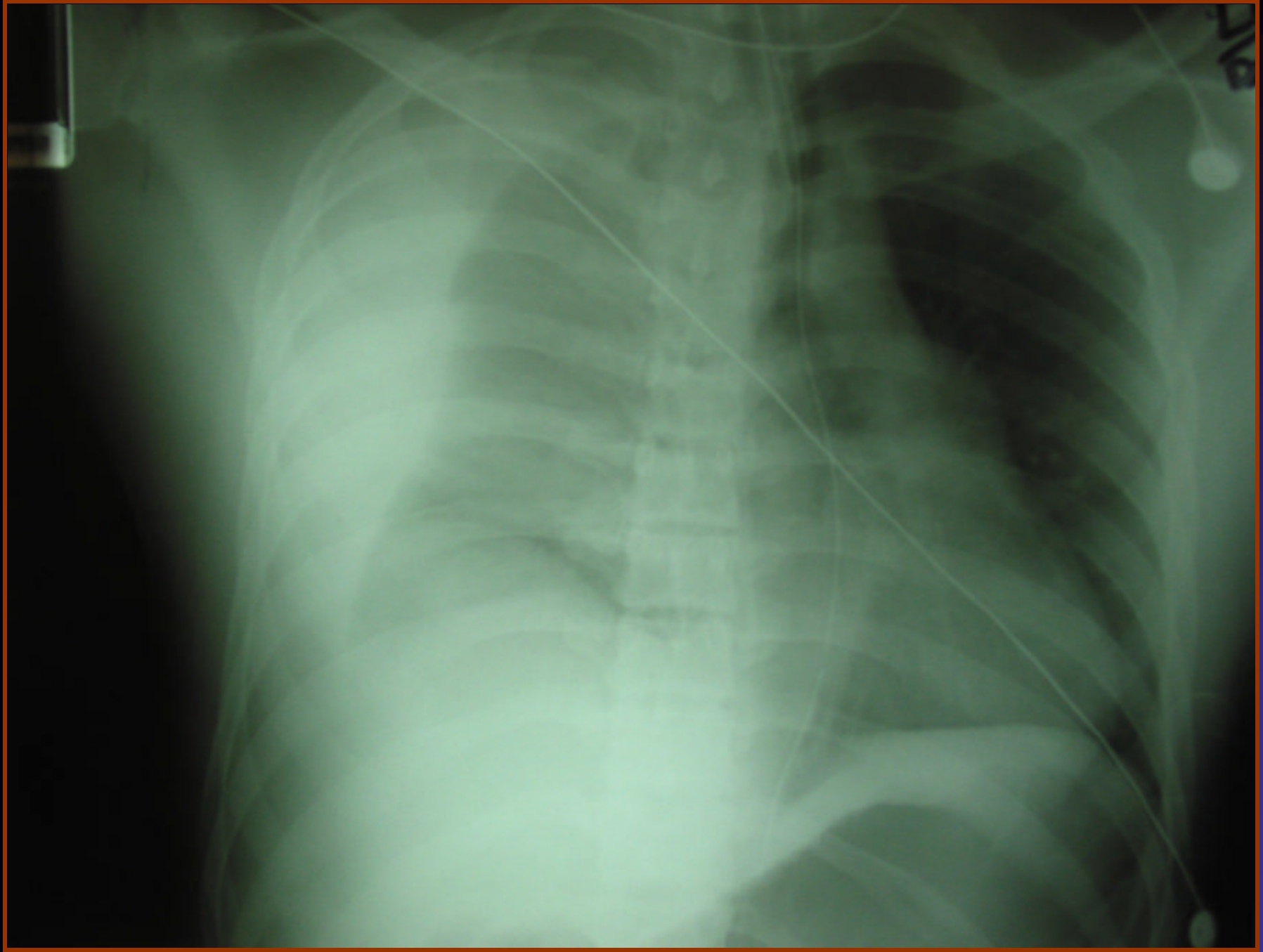


**If you don't
LOOK
for JVD,
you won't see it**





**Ruling out
“positive intrathoracic
pressure”
is one of the most
vital points in
critical care**





**And, my goodness,
what DO we DO
with waveform
capnography in
the future of EM??**

**Only with excellence in
physical assessment and
commitment to patient service,
can the best possible care
be given**

“The Demise of the Physical Exam”

Sandeep Jauhar, MD, PhD

NEJM 354:548-551

February 9, 2006

“The Stethoscope and the Art of Listening”

Howard Marken, MD, PhD

NEJM 354:551-553

February 9, 2006



**7. "It isn't what
it isn't....**

***...it's what it MIGHT be
that will
get you in trouble....***

...and hurt your patient"

**Beware of
abdominal pain AT REST,
especially in the
older patient....
...especially with
co-morbid illnesses
and (in hospital)
elevated WBC's**

“The general rule can be laid down that the majority of severe abdominal pains which ensue in patients who have been previously fairly well, and which last as long as six hours, are caused by conditions of surgical import”

The Early Diagnosis of the Acute Abdomen
Sir Zachary Cope
pp 5, Oxford Medical Publications, 1921

**The difference between
a “specialist” and a
“generalist” is in
the rigor of the
application of a
differential diagnosis**



**What are our abilities
to diagnose patients
in the ED?**

Are there limits?

**What diagnostic
limits do**

YOU

give yourself?

8. We are not heroes....

**You do not have to PROVE
that your patient will do okay
outside of the hospital**

**Ask yourself,
might the patient NOT do well?**

**There is no “rite of passage”
contrary to what you learn
from your buddies**

**“...ah...she'll probably
do okay at home”**

**9. If a person is an
insulin-dependent diabetic
and has a
potentially major problem
with another
major organ system,
strongly consider
hospital admission**

**10. Once the patient is
“out the door”,
(or non-transported)
you have lost control
of the situation....**

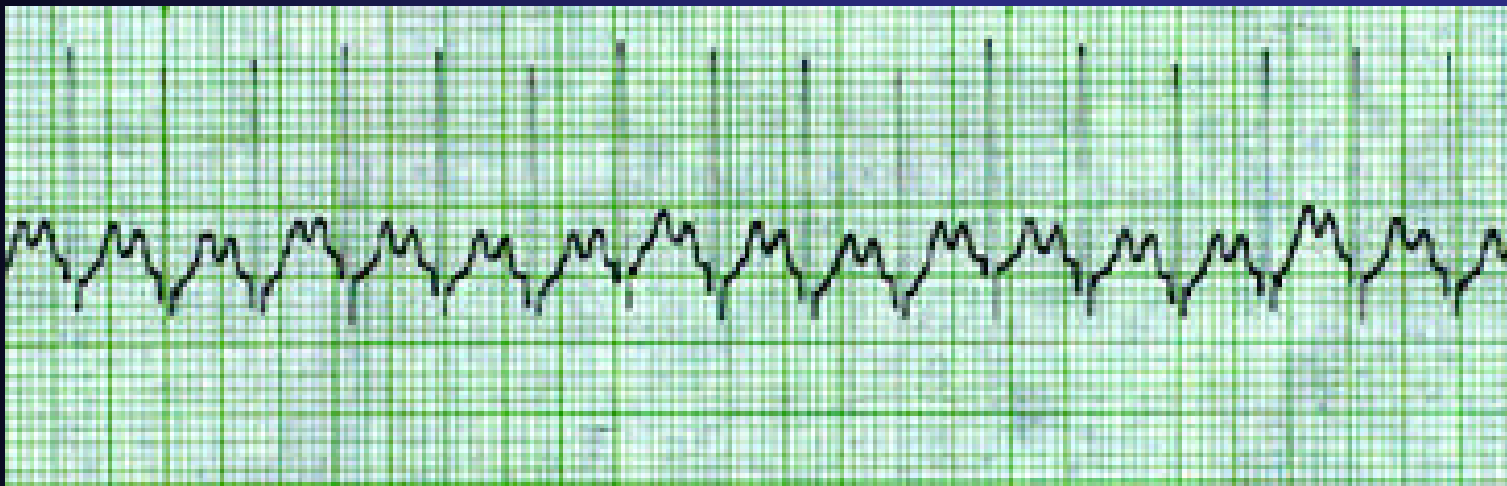
11. Always explain a tachycardia...

Corollary: *Don't depend
on the presence
of a tachycardia
to determine that
an emergency
is present*

**A “physiological
response”**

Remember:

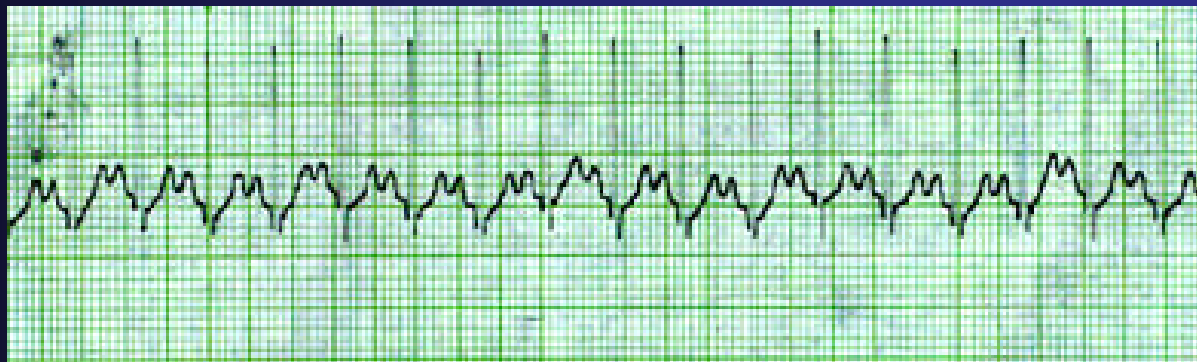
**The Maximum Sinus Tachycardia
for a patient is
about $220 - \text{age}$**



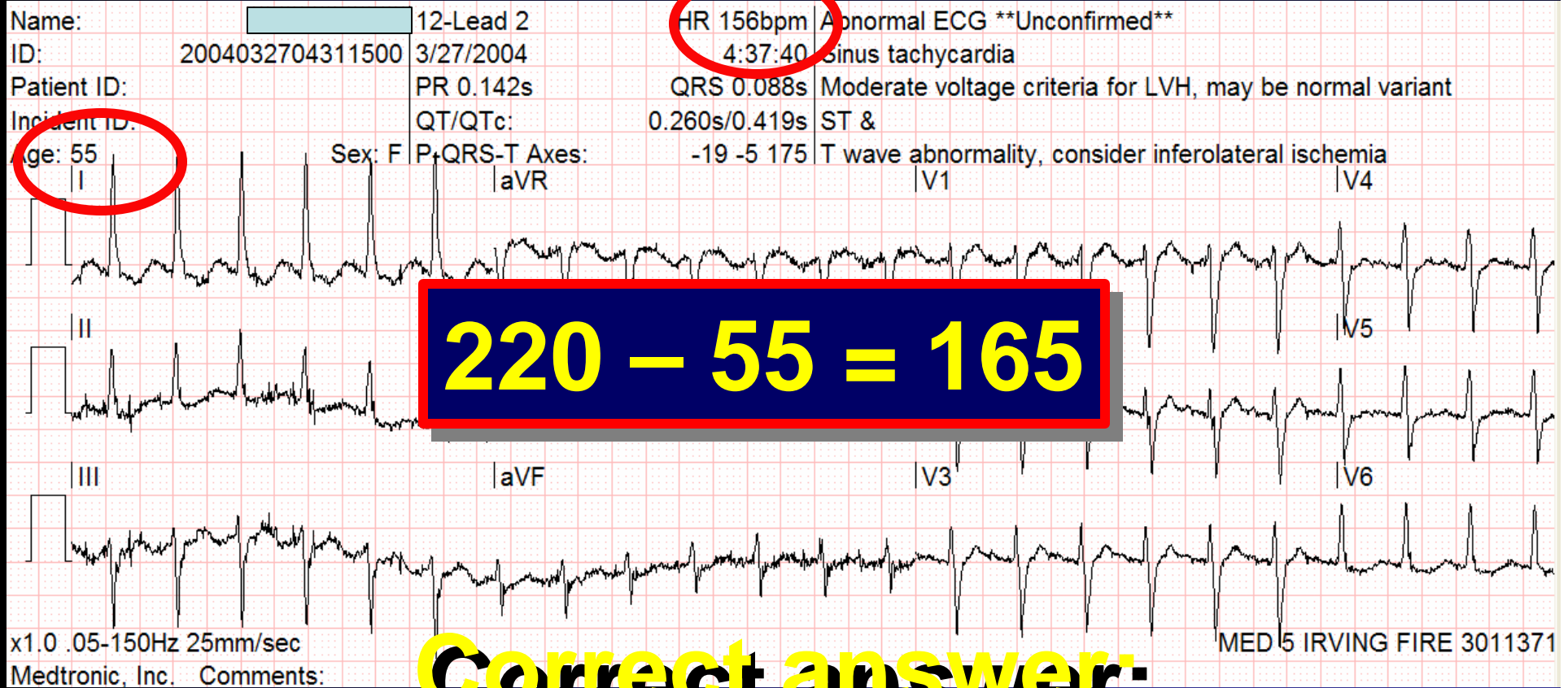
$$\text{Baby} = (220 - 0) = 220$$

$$\text{Snerd} = (220 - 54) = 166$$

$$\text{Aunt Minnie} = (220 - 70) = 150$$



What is this rhythm?



“It COULD be sinus tach”

**If you forget everything
else that I say:**

**Remember that
patients having
near maximum
sinus tachycardia
at rest
are dying!**

Hemorrhagic shock

Sepsis

Tension

Tamponade

Ruptured aorta

Ruptured ectopic

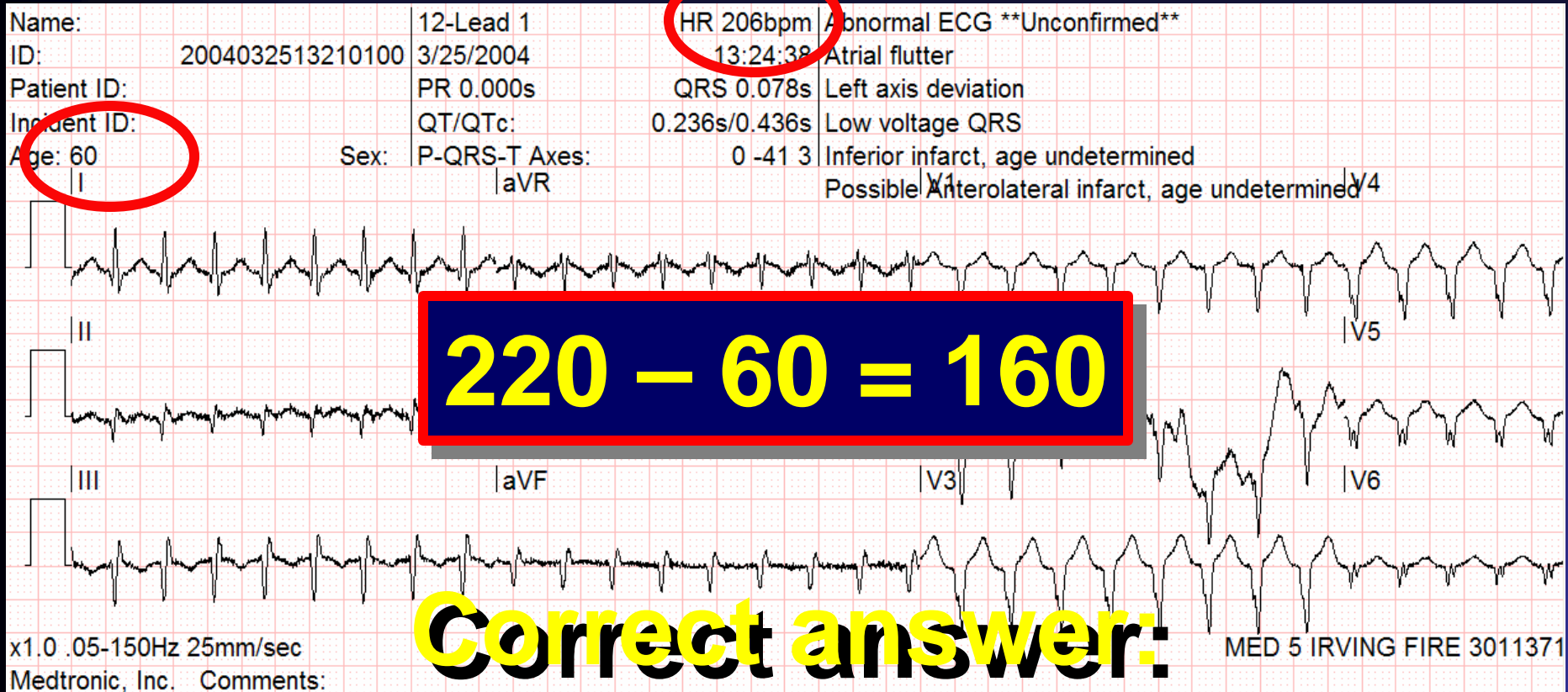
Massive P.E.

***Something
mobilizing a
massive
physiological
response***

**Your job is
to determine if
a rapid rhythm
MAY be sinus tach**

***If it is,
you must take action***

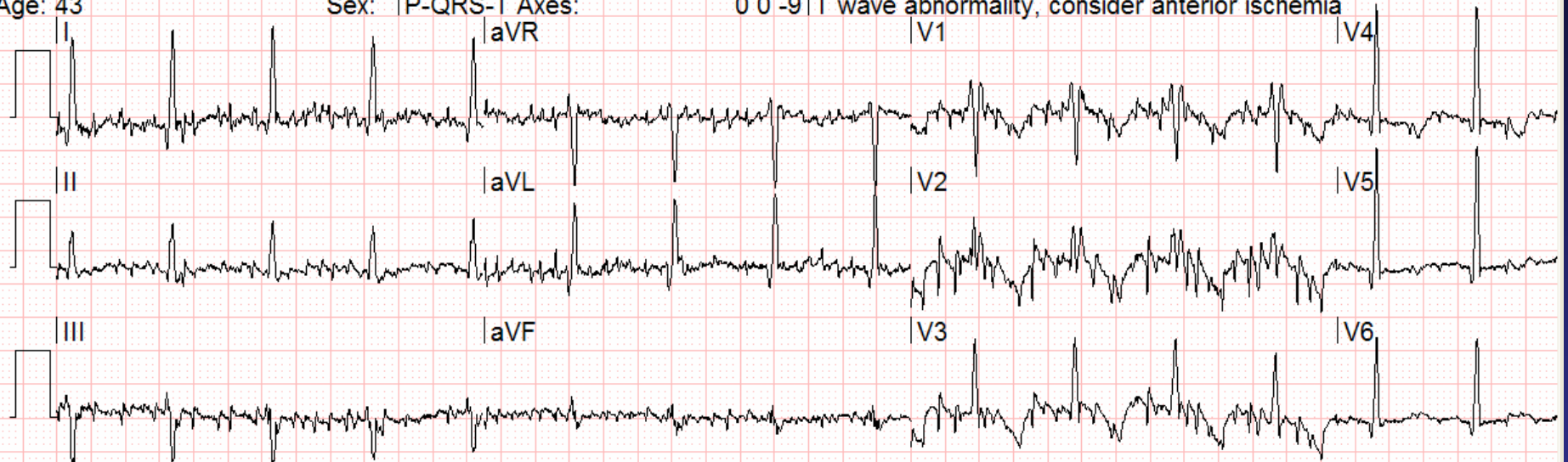
What is this rhythm?



Correct answer:

**"This HAS to be
an arrhythmia**

| | | | |
|----------------------|-----------|----------------------|--|
| Name: | 12-Lead 2 | HR 102bpm | Abnormal ECG **Unconfirmed** |
| ID: 2004033009265000 | 3/30/2004 | 9:30:57 | Sinus tachycardia with 1st degree AV block |
| Patient ID: | PR 0.310s | QRS 0.090s | RSR' or QR pattern in V1 suggests right ventricular conduction del |
| Incident ID: 36989 | QT/QTc: | 0.370s/0.482s | ST & |
| Age: 43 | Sex: | P-QRS-T Axes: 0 0 -9 | T wave abnormality, consider anterior ischemia |



x1.0 .05-150Hz 25mm/sec
 Medtronic, Inc. Comments:

R18 R18 3011371

What is the ambient temperature?



**What is the patient's
blood pressure?**

**The most common cause
of tachycardia
in Parkland ER
is probably albuterol....
...followed by
amphetamine, cocaine,
sepsis, DKA....**

**The most common cause
of bradycardia
in Parkland ER
is probably
beta blockers....**

**...probably ISN'T great
physical conditioning....**

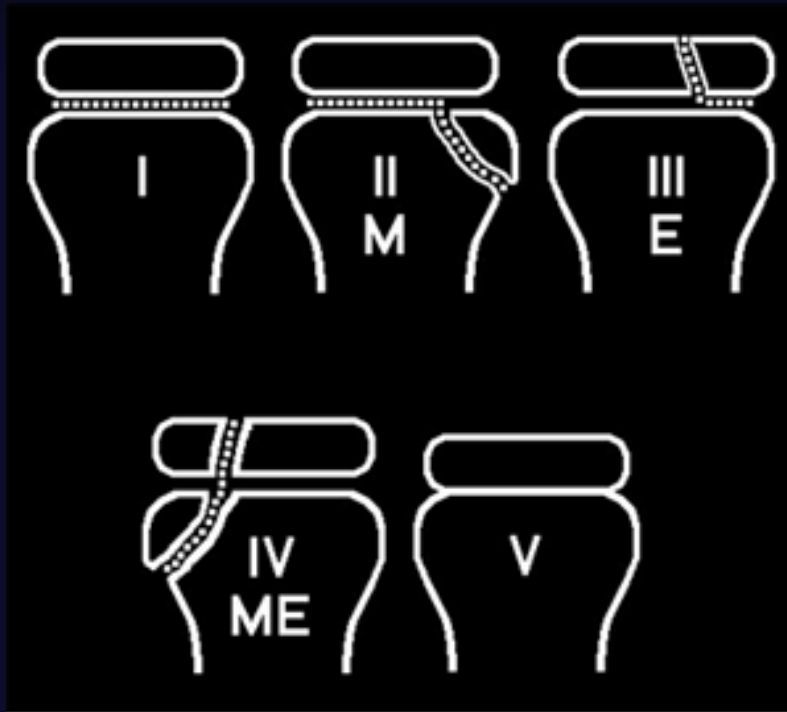
**The incidence
of bradycardia
post-hemorrhage,
especially
intraperitoneally,
is published to be
as high as
7 to over 20%**



**12. If it's blue,
it's broken....**

**If someone
“FOOSH’s”,
AND you find
swelling OVER
a bone of the
involved extremity,
that is a fracture**





**A doughy edema
over the distal forearm
of a kid after a fall
(even with a normal x-ray)
is a fracture**

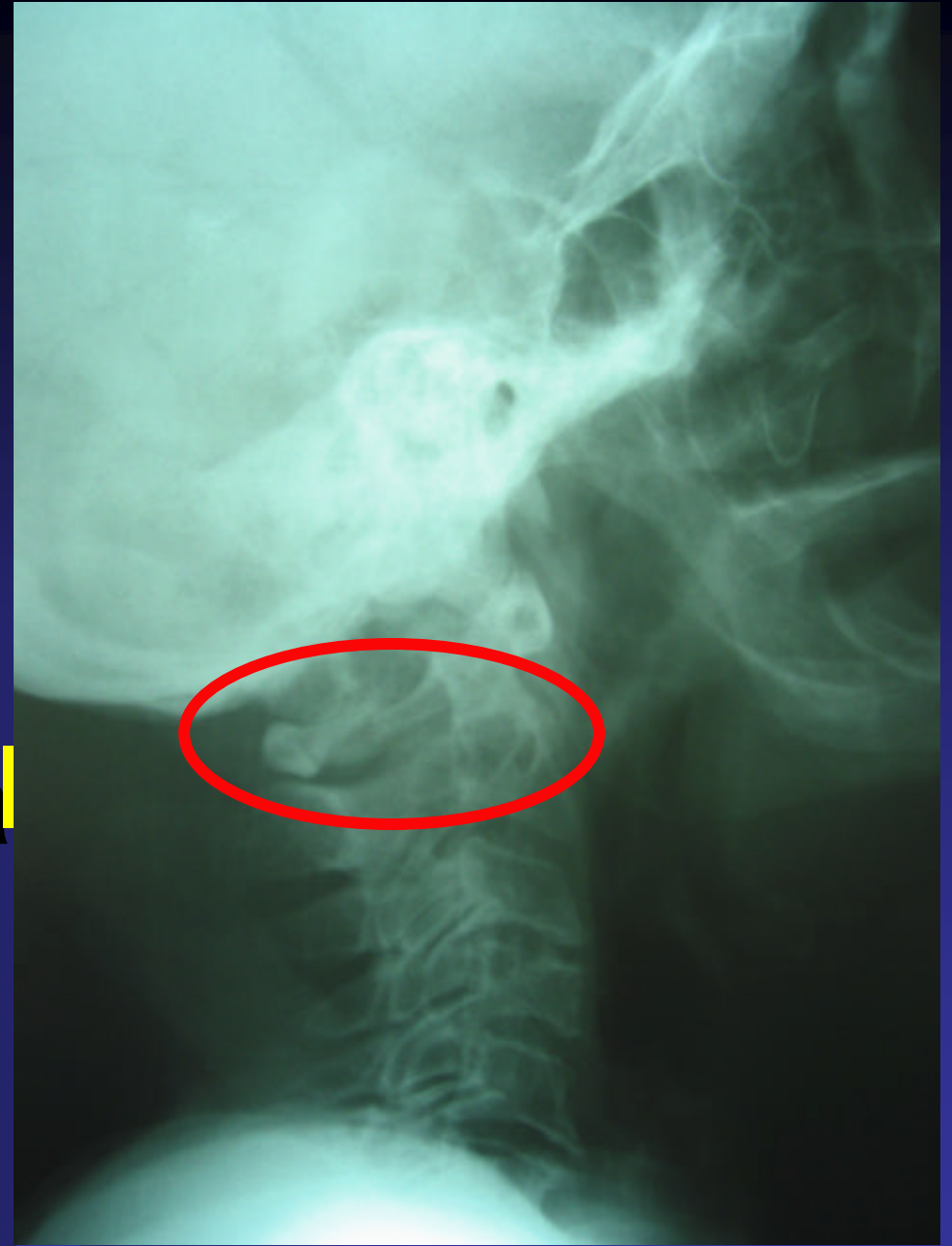


**And,
you haven't
cleared a neck
until you've
seen T1**





**And, don't
assume that
something
potentially
serious is
an anatomical
variant until
you've
proved it**

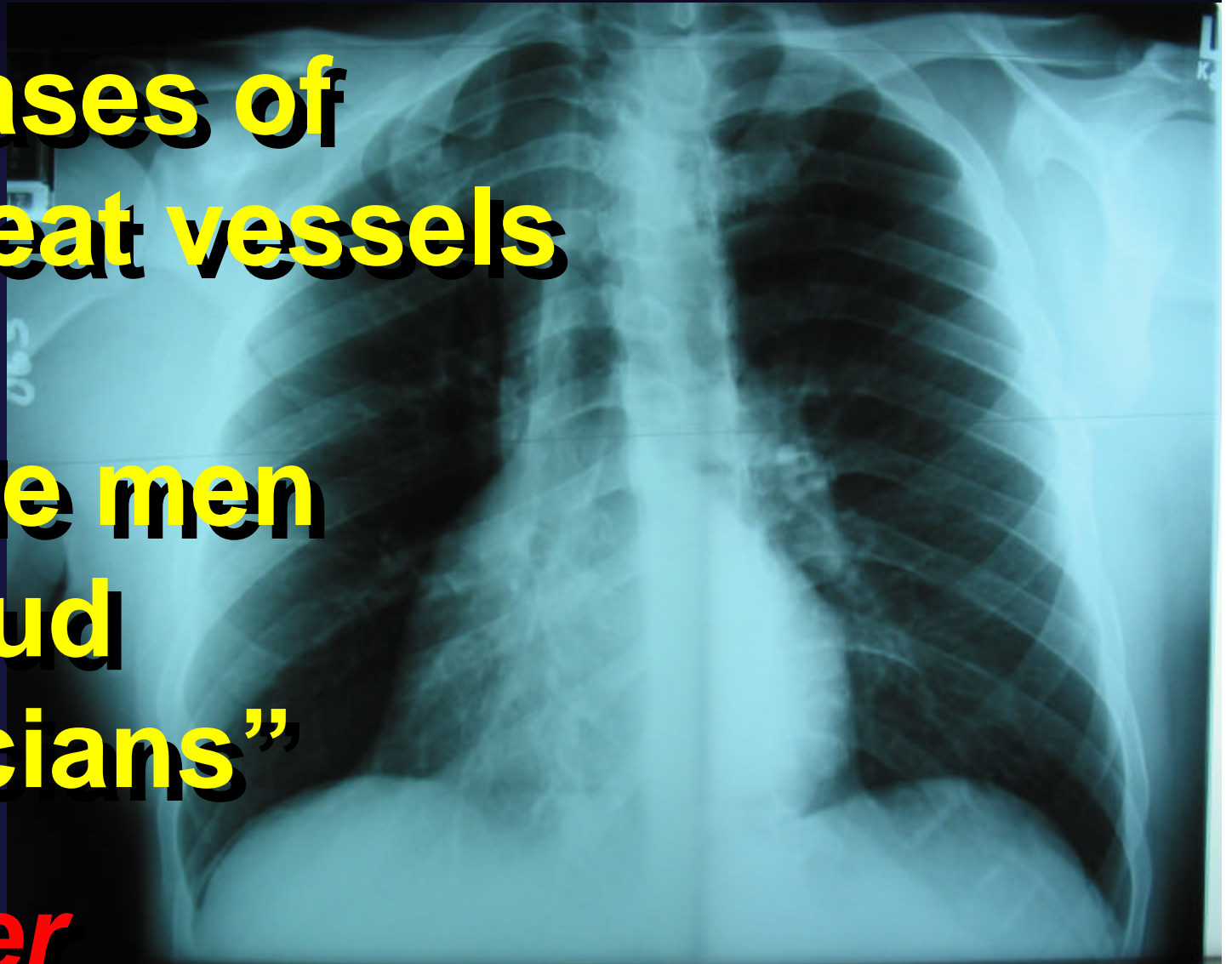


**And, don't
chase a
finding on
a study
until the
study is
done
correctly
...but don't waste time
if it may be dangerous!!**

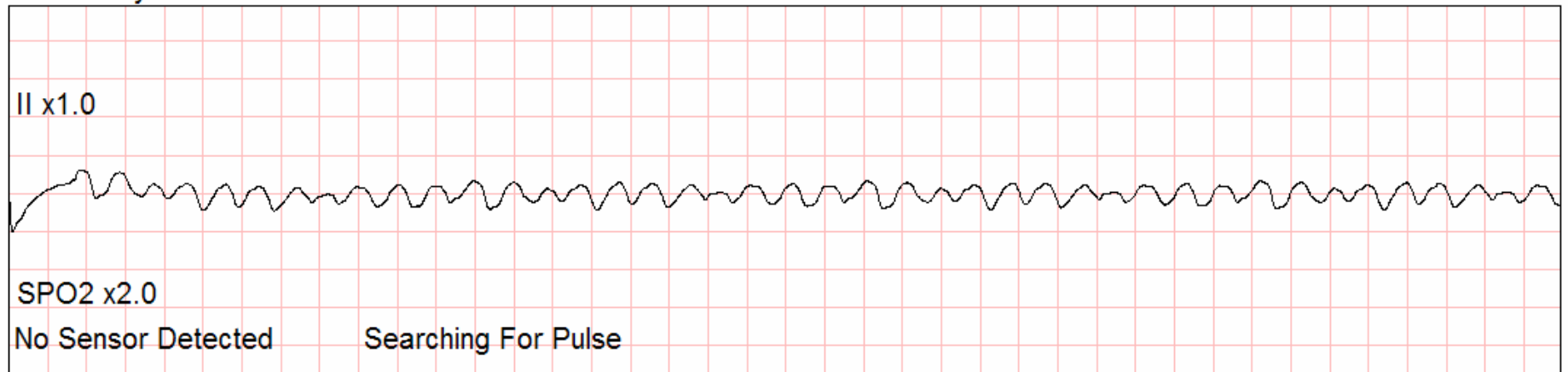


**“Diseases of
the great vessels
make
humble men
of proud
physicians”**

...Osler

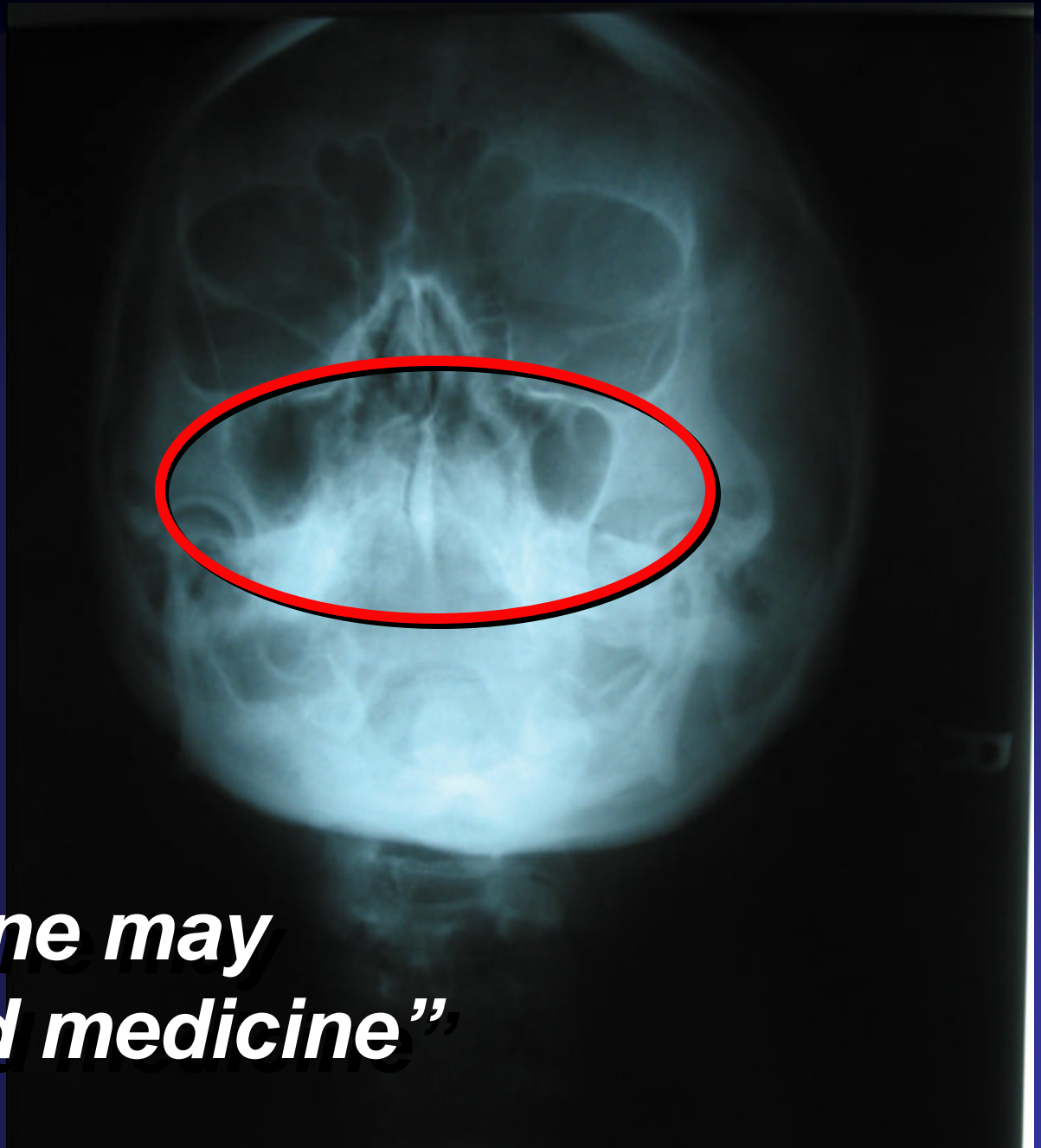


▼ Initial Rhythm

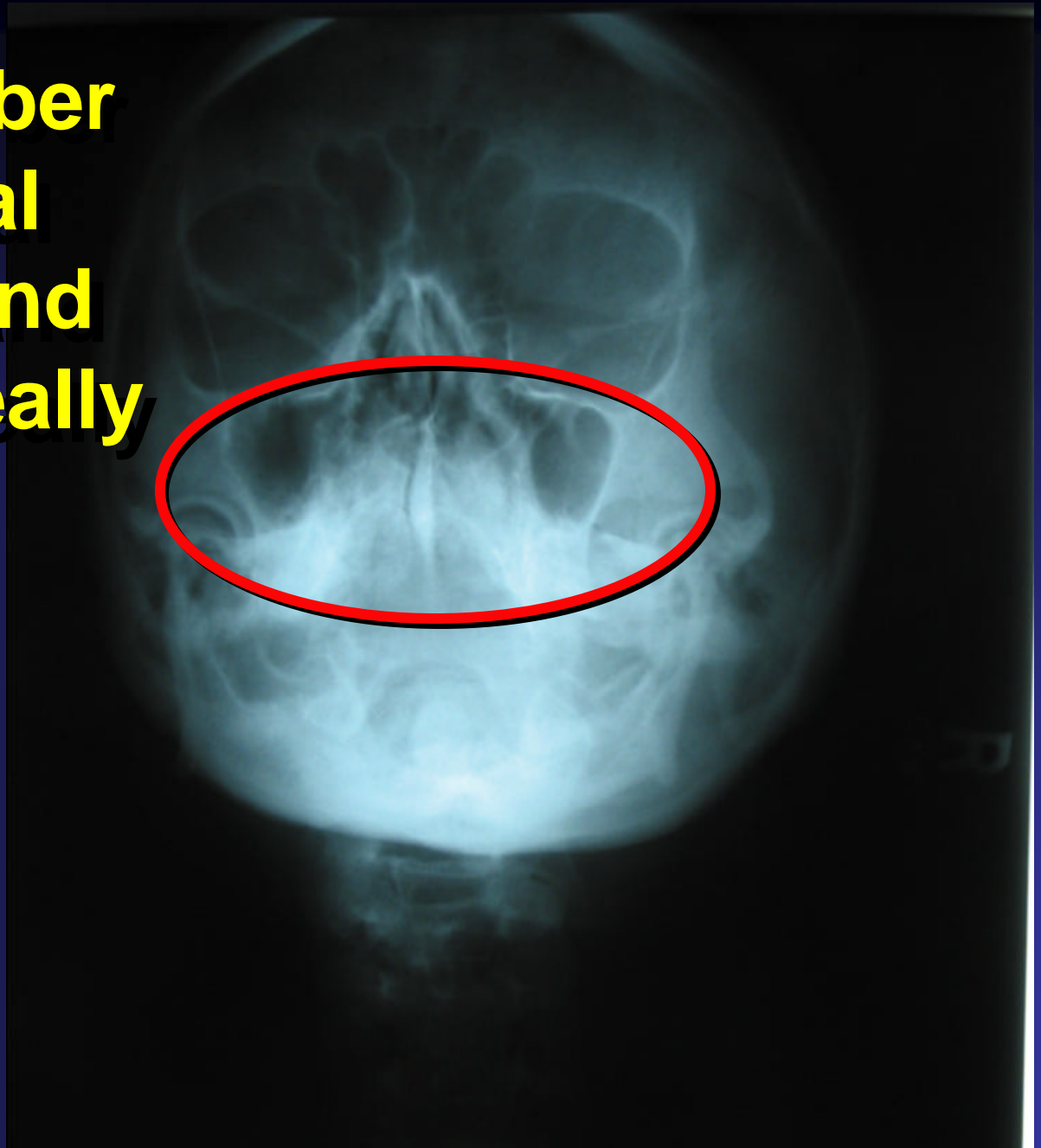
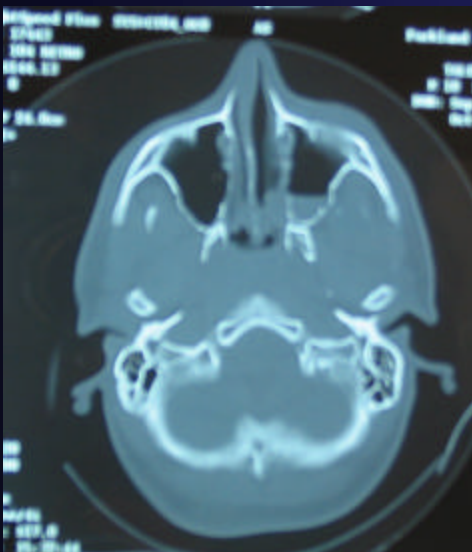


**Don't be
afraid to
learn to
read a
plain skull
film....**

***“old medicine may
still be good medicine”***



**Just remember
that a normal
plain skull and
spine film really
means
NOTHING!!!**



13. Never send home (or non-transport) a sleepy baby that doesn't come to full wakefulness

Corollary - If the baby vomits his dose of medication, be careful unless you've seen the LP results

**14. Give the first dose
of medication
before the patient
is released from care....**

***....whether transporting
or NOT!***

**The most closely
associated factor
affecting morbidity and
mortality of patients
seen in the ED with
pneumonia is**

**TIME TO FIRST DOSE
OF ANTIBIOTICS!**

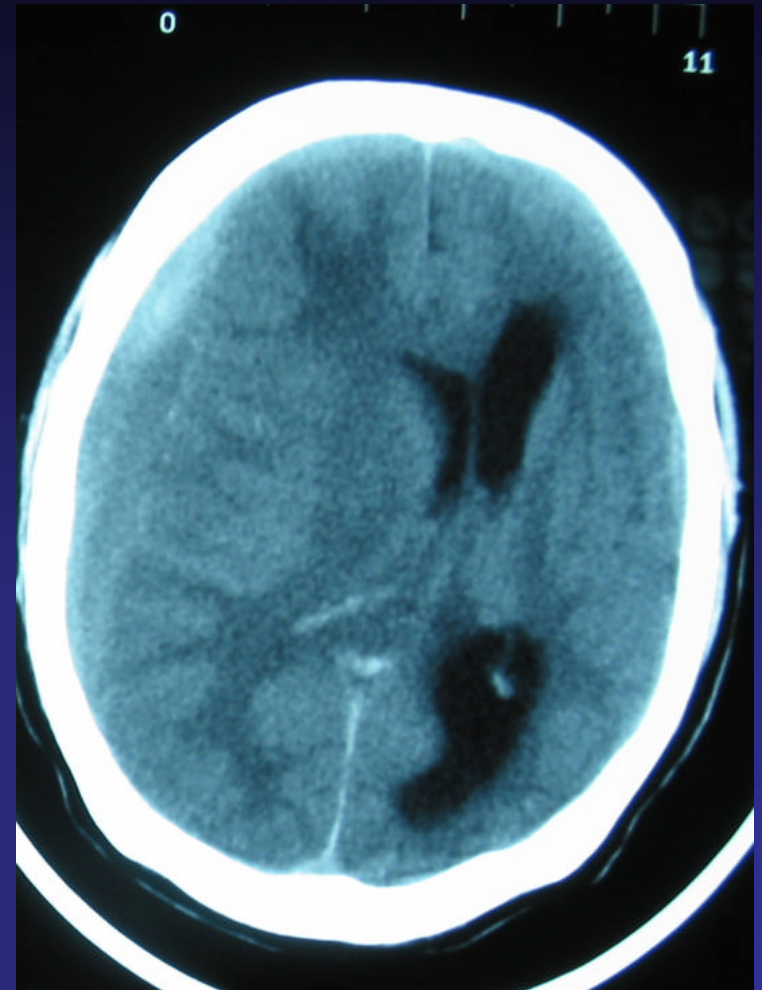
**15. A normal EKG
rules out nothing**

**16. AMS ALWAYS
means that
something is wrong....**

***...until you
prove it otherwise....***

**The “computer” will
come to “full on”
in everybody
unless there is a
chemical or structural
abnormality....**

Corollary -
If a patient,
post head trauma,
is lying quietly
and then
STOOLS IN THE BED,
the patient has
a subdural hematoma
until proven otherwise



***...and, perhaps
most importantly...***

**17. You have to look
HARD for a reason
NOT to give a dose of
Ativan to a patient
in Parkland ER!!**

Other postulates

- ***“Back pain, leg weakness, stat MRI”***
- ***“Don’t you want to get a pregnancy test before that abdominal x-ray, doctor?”***



Violence in the Emergency Department

Anticipate

**Do NOT
INFLAME
the Situation**

Evaluate

Get enough help

Sedate as needed:

Versed is good – IM, IN, IV

Other sedatives

TASER

Sux Blow-dart



ALWAYS Remember:

*Once you've taken somebody
down, you are fully
responsible for them*



Finally!!!



**Hell for
EP's and Staff
who are
RUDE
to EMS Crews**

The
Golden Rule
of Survival in
HOSPITAL
Emergency
Department
Life

**The Nurses
RUN the Hospital!!**



**When in doubt,
re-read the rule!**



**Survival is
the key....**

**...winning
“skirmishes”
means nothing**

**Bribery does
not work, and
you'll only be
fooling yourself**





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Godspeed...

...and be careful...

? or !