



**BLS in EMS**

*Getting at the Issue*

3/20/2007

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A group of parachutists is seen descending over a landscape during a sunset or sunrise. The sky is a warm, golden-orange color, and the ground below is a darker, reddish-brown. Several parachutes are visible, some fully deployed and others still in the process of opening. The silhouettes of the parachutists are visible against the bright sky. The URL "www.uts.w.ws" is overlaid in the center of the image in a white, serif font with a slight shadow effect.

[www.uts.w.ws](http://www.uts.w.ws)

**The medical and  
ethical performance  
of EMS professionals  
has never been  
more important than  
it is today**



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# The emerging of a profession:



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*Basic life support  
issues press hard  
upon ALS systems*

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*Paramedics become  
lulled into complacency  
and beaten down into  
exhaustion*

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***Emergency rooms  
have become  
overfilled with  
case after case***

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*Many patients assume  
they can be seen faster  
in the ER if they  
call 911 for transport*

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*We call them  
the “veterans”  
who know the  
system*

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*Many major urban  
centers run  
nontransport rates  
exceeding 60%*

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*The question  
of the  
Paramedic-initiated  
refusal...*

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# ***Predicting Admission:***

***Studies abound that***

***Paramedics cannot***

***reliably do this***

**The ability to predict  
both admission as well  
as ICU admission  
was the flip of a coin**



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***Thus, transport  
decisions must be made  
by a strict  
medical direction  
protocol***

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***Transport decisions  
must be submitted  
to strict  
quality control  
analysis***

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**What if we could build  
on the experience of  
really devoted  
Paramedics?**

*...do we have an  
“untapped resource?”*

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**Evidence  
suggests that  
we do**

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# Factors to fight:

*Fatigue*

*Boredom*

*Unchallenging practice*

*Increasing cynicism*

# Factors of strength:

*Advanced skills*

*Maturity*

*Commitment to service*

*Community respect*

# Factors of strength:

*The Same as  
ANY  
Advanced Level  
Practitioner*

# What about Pediatric Call Lines?

*For decades,  
pediatric screening has  
been performed safely  
by nurses using protocols  
via telephone*

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# What about Poison Control lines?

*Again, for decades,  
safe management of  
millions of patients  
via telephone has  
been conducted and  
proved to be safe*

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**What could we do?**

*Use Priority Dispatch  
through a  
carefully designed  
protocol employing  
best practices*

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Search PubMed for priority dispatch Go Clear Save Search

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- 1: [Deakin CD, Cheung S, Petley GW, Clewlow F.](#) Related Article


 Assessment of the quality of cardiopulmonary resuscitation following modification of a standard telephone-directed protocol. Resuscitation. 2007 Mar;72(3):436-43. Epub 2007 Jan 18. PMID: 17239515 [PubMed - in process]
- 2: [Cheung S, Deakin CD, Hsu R, Petley GW, Clewlow F.](#) Related Article

 A prospective manikin-based observational study of telephone-directed cardiopulmonary resuscitation. Resuscitation. 2007 Mar;72(3):425-35. Epub 2007 Jan 16. PMID: 17224230 [PubMed - in process]
- 3: [Aylwin CJ, Konig TC, Brennan NW, Shirley PJ, Davies G, Walsh M, Brohi K.](#) Related Article

 Reduction in critical mortality in urban mass casualty incidents: analysis of triage, surge, and resource use after the London bombings on July 7, 2005. Lancet. 2006 Dec 23;368(9554):2219-25. PMID: 17189033 [PubMed - indexed for MEDLINE]
- 4: [Hinchey P, Myers B, Zalkin J, Lewis R, Gamer D.](#) Related Article

 Low acuity EMS dispatch criteria can reliably identify patients without high-acuity illness or injury. Prehosp Emerg Care. 2007 Jan-Mar;11(1):42-8. PMID: 17169875 [PubMed - in process]
- 5: [Dias JA, Brown TB, Saini D, Shah RC, Cofield SS, Waterbor JW, Funkhouser E, Temdrup TE.](#) Related Article

 Simplified dispatch-assisted CPR instructions outperform standard protocol. Resuscitation. 2007 Jan;72(1):108-14. Epub 2006 Nov 22. PMID: 17123687 [PubMed - in process]
- 6: [Feldman MJ, Verbeek PR, Lyons DG, Chad SJ, Craig AM, Schwartz B.](#) Related Article

 Comparison of the medical priority dispatch system to an out-of-hospital patient acuity score. Acad Emerg Med. 2006 Sep;13(9):954-60. Epub 2006 Aug 7. PMID: 16894004 [PubMed - indexed for MEDLINE]

# **CONCLUSIONS:**

**Telephone advice may be a safe method of managing many category C callers to 999 ambulance services.**

## **CONCLUSIONS:**

**The Medical Priority Dispatch System exhibits at least moderate sensitivity and specificity for detecting high acuity of illness or injury.**

**`This performance analysis may be used to identify target protocols for future improvements.**

# What could we do?

*The Seattle model  
for priority dispatch  
has lived in a  
constant state of design  
and renewal for 30 years*

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**Through such a system  
Basic Life Support calls  
receive a “cold” response  
with BLS ambulances**

**How accurate  
are they?**

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**According to  
Dr. Copass,  
a 15% overlap  
exists where either  
ALS or BLS should  
have been sent but  
the other went**

**Is 15%  
acceptable?**

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# What is it that we want?

*Safety*

*Convenience*

*Service*

*Economy*

*Save wear and tear*

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# How can we do that?

*Safety* ..... *always dispatch*  
*Convenience* ..... *at all hours*  
*Service* ..... *exam*  
*Economy* ..... *save ER rides*  
*Save wear and tear* ..... *use 1 medic*

**What would these  
medics do at these  
odd hours?**

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**Act like a  
primary level  
practitioner assistant**

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# Skills Applied

*Primary Survey*

*Assess for emergencies*

*History Taking*

*Physical Assessment*

*Public health assignment*

*Arrange transport*

# Signs of Shock

**Early**



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

**Late**

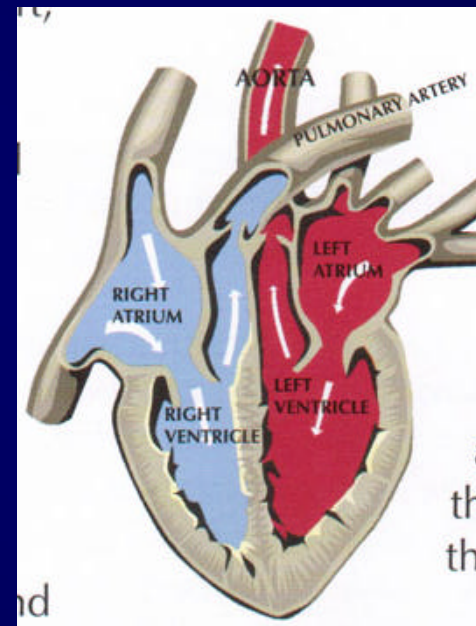


**Hypotension**  
**Altered LOC**  
**Cardiac arrest**  
**Death**

# Screening for Trouble:

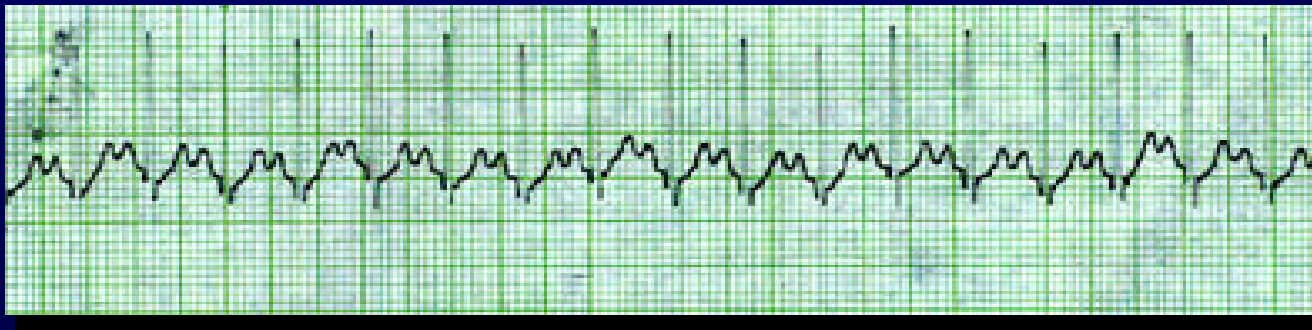
Anything that looks  
like a patient is having  
an emergency...

*ALS is dispatched  
priority 1 (code 3)*



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**...so that the subtle illness**  
**only manifested by mild tachycardia**  
**must be transported, under protocol**

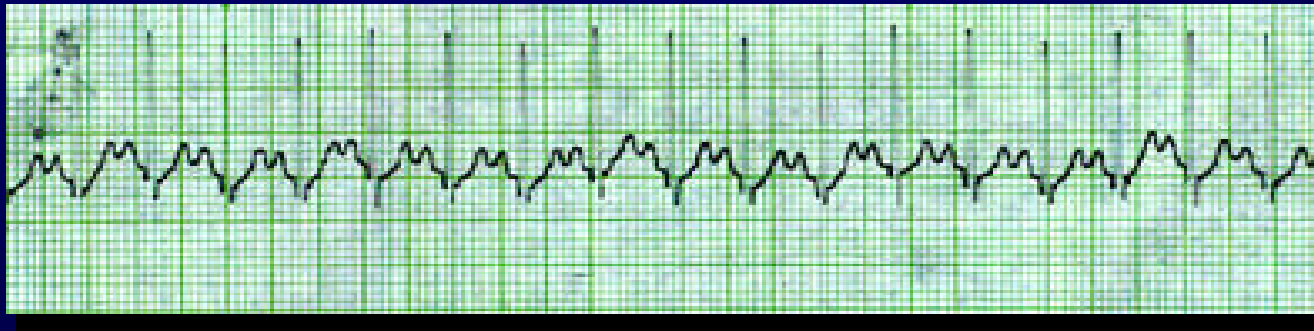


**In EMS, probably excitement.**  
**But, it may well be drugs such as**  
**Albuterol or meth/coke, sepsis, or shock**

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# Maximum Rate of Sinus Tachycardia



(220 – age)

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# Case #1

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**A call goes down from a guy at home who has called at least daily for months to “come gimme a drink!”**

**BLS is dispatched. Upon arrival he is found to be confused, with slurred speech, pale, bradycardic, flat neck veins, midline trachea.**

***What to do?***



**Here we have a patient,  
previously well  
(okay, bad habits)  
but now with  
altered mental status  
and facial trauma**

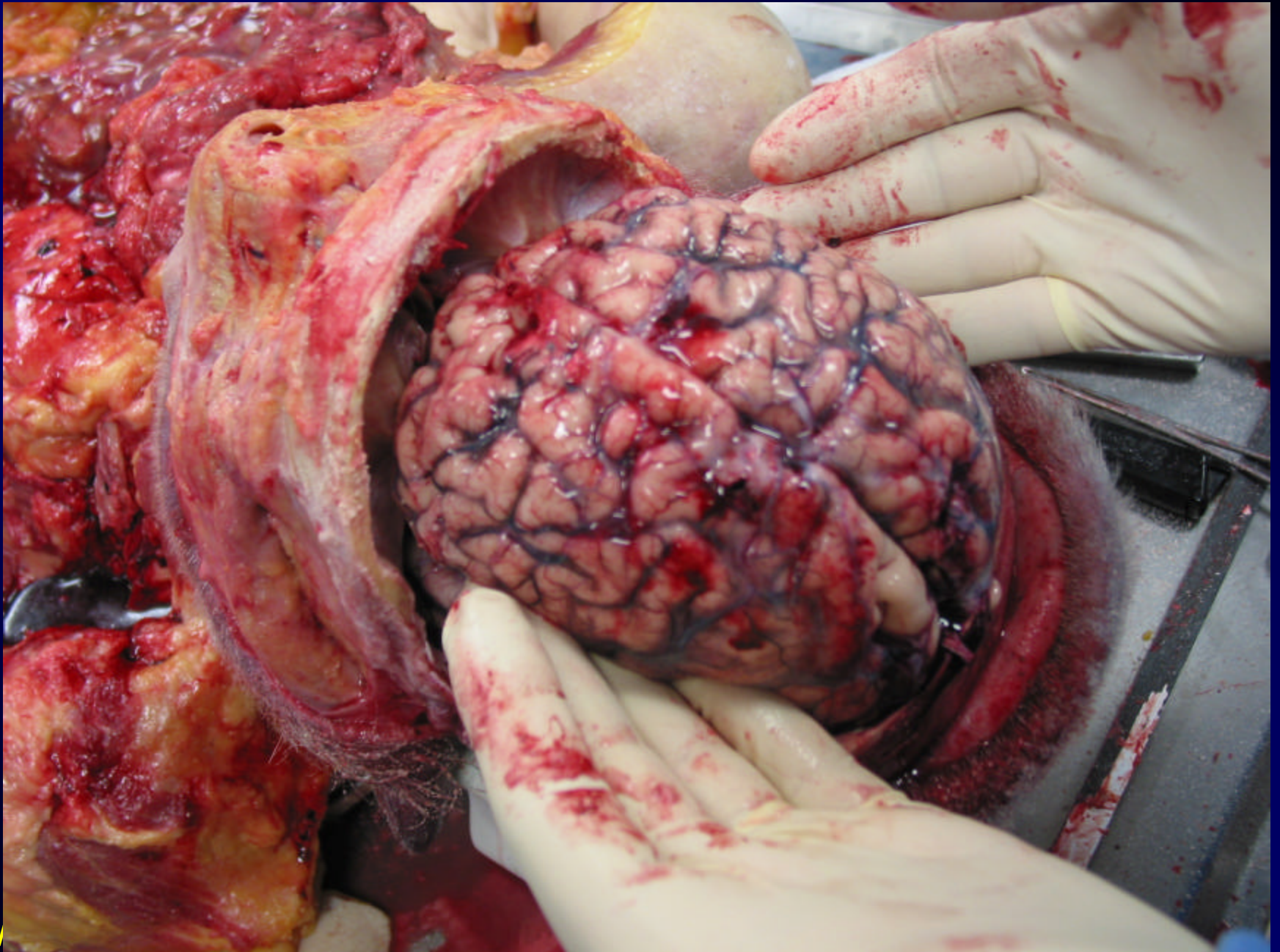
**Always assume  
that someone with  
head trauma  
MAY have an  
intracranial bleed  
until proven otherwise!**

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*...and of course,  
give considerations  
to CSpine issues...*

**CAN'T CLEAR THE  
CSPINE WHEN THE  
PATIENT IS ALTERED!**

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ASQUEZ, BENJAMIN  
913609

20-NOV-02 15:34:18.01 267.06  
Parkland HHS Rm 3  
NO

5.0 20-NOV-02  
VASQUEZ, BENJAMIN  
2913609

W100/L40

15:34:  
Parkl:

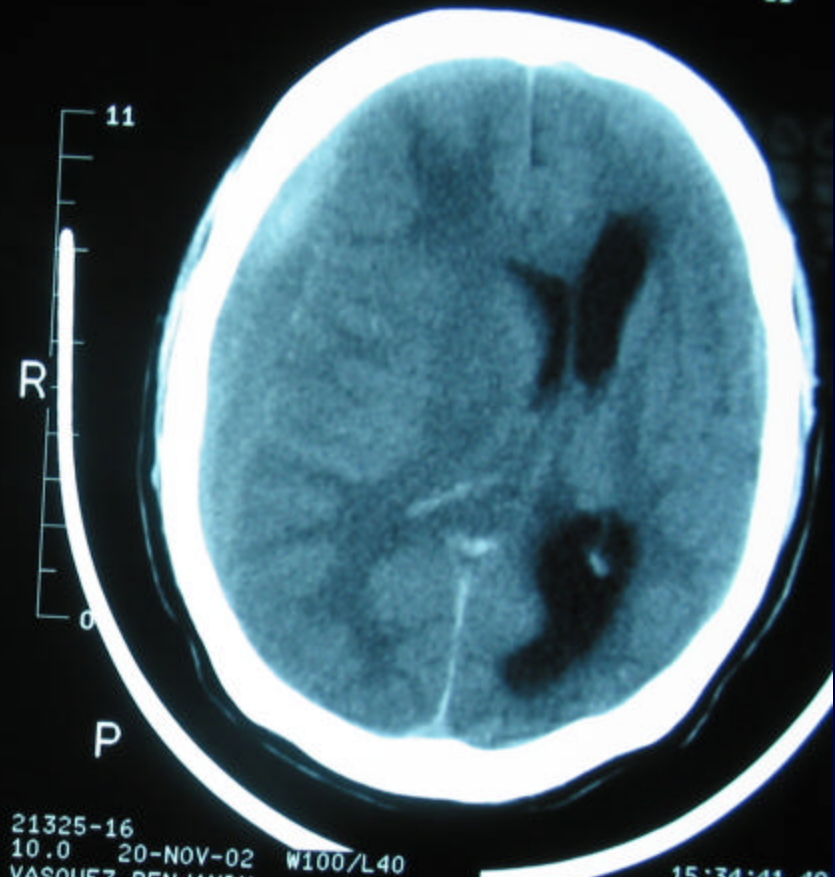
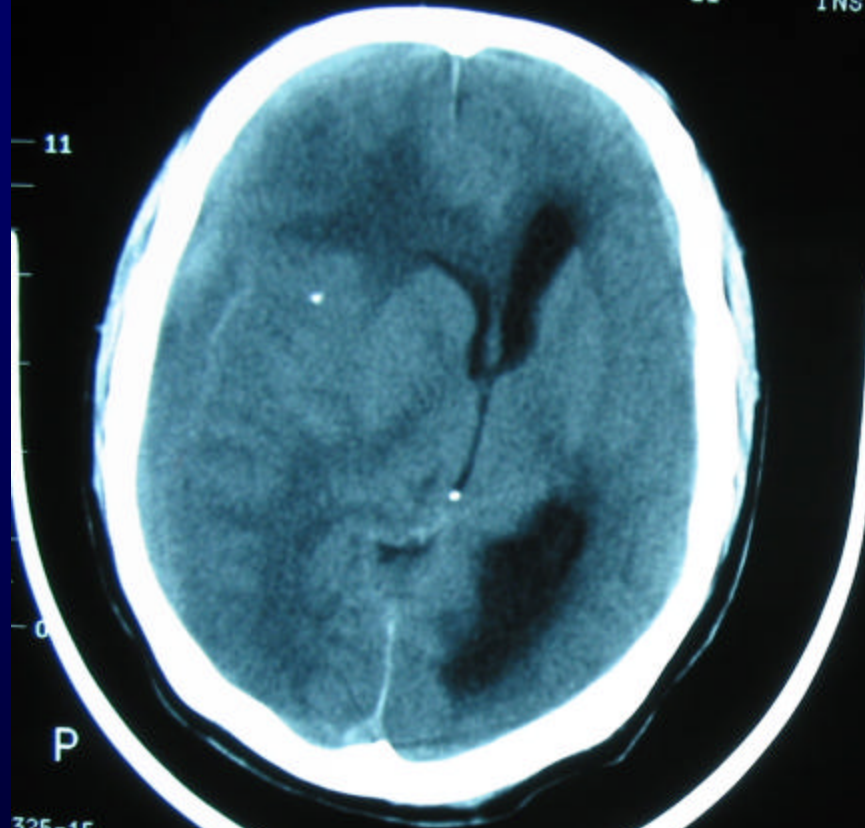
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11

INSTAVIEW

0

11



325-15  
.0 20-NOV-02  
SQUEZ, BENJAMIN  
13609

W100/L40

15:34:38.08 267.00  
Parkland HHS Rm 3  
NO

21325-16  
10.0 20-NOV-02  
VASQUEZ, BENJAMIN  
2913609

W100/L40

15:34:41.49  
Parkland H

0

11

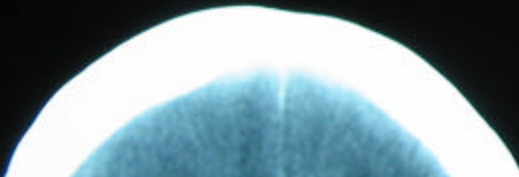
INSTAVIEW

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11

IN

11



11



# **CAT Scans in The Field?**

**Well, not any time soon,  
Though in Odessa, Texas  
One of the first studies  
On field ultrasound machines  
Is now being conducted!**

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# Ultra Assessment Tool



An Odessa (Texas) Fire Dept. EMS crew views an ultrasound image of a fetus while en route to the hospital.

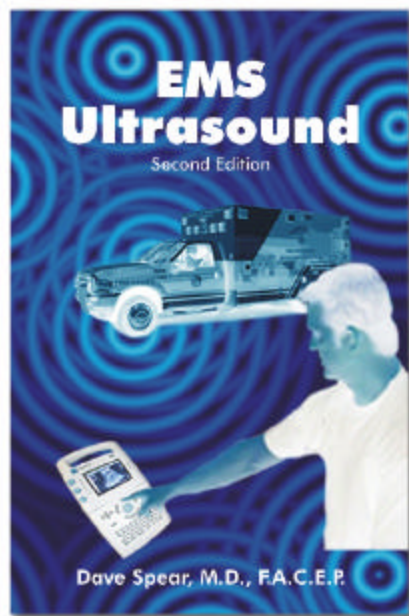
**911**  
S O N O



P.O. Box 13831  
Odessa, TX 79768  
1-800-806-1982  
432-333-9377  
staff@911sono.com

EXPLORING EMS ULTRASOUND

## Something New In Prehospital Care



Paramedics and flight nurses have begun using portable ultrasound machines. These machines allow detection of blood in the abdomen of trauma patients, evaluation of cardiac motion in critical patients, and detection of pregnancy.

Learn the basics of ultrasound and find out how these devices can be used in the field and in the emergency room.

[About the Author](#)

**BRINGING  
ULTRASOUND  
TO EMS**

**911**  
S O N O  
911Sono.com

EMS Ultrasound  
Second Edition  
by Dave Spear, M.D., F.A.C.E.P.  
ISBN# 0-9707677-2-2



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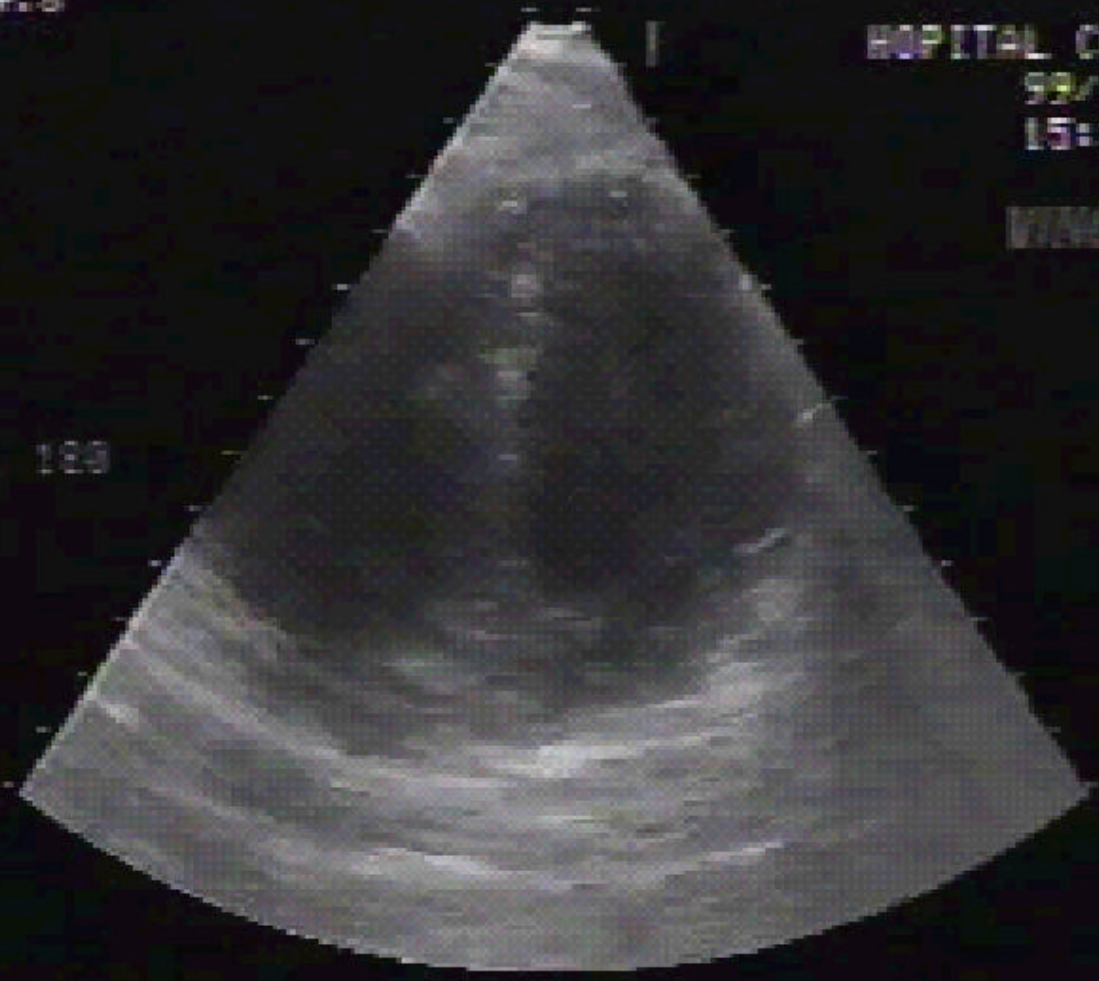
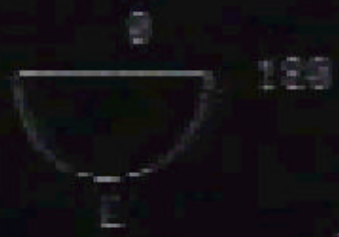


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5.88 = 4.8  
▲ 8  
▲ 8  
▲ 5  
▲ 4

HOPITAL COCHIN  
99/18/28  
15:39:33  
MAGMED

14 cm  
35.70



7K122

ECG  
Enea. TM pos

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**Obviously this guy  
is in trouble**

*Dispatch would be contacted  
immediately to send  
ALS Code 3 (Priority 1)*

**The patient would be taken  
to a Level 1 Trauma Center**

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**An example of the fact  
that Dispatch can only act  
on the information  
that it can get**

***And sometimes that information  
just cannot reveal what the  
situation really is***

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# Case #2

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**Gal calls up to say that her back hurts.  
Records show she has called  
3/week for months.**

**BLS is dispatched. Upon arrival she is found to be in no distress, complaining of her customary back pain without trauma, fever, or neurologic symptoms**

***What to do?***

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**Working under protocol,  
the medic could either offer  
transport to the patient OR  
provide an appointment to a  
choice of physicians who will  
see the patient the next day  
in the office**

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**Online Medical Control  
can assist for example  
in administering pain  
medication**

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**Aftercare instructions  
would be left with the patient**

***\$\$\$ A bill could be cut for  
services rendered \$\$\$***



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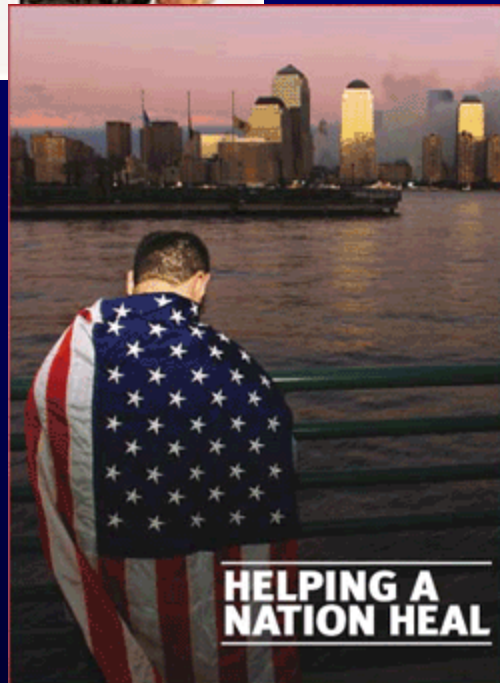


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# Synthesis



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**The professionalism of EMS  
continues to grow**

**Our heroes of the streets,  
have more opportunity than ever  
to help their patients**

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*Whoever they are,  
wherever they work...*



**...only the best,  
every time, is enough**

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[drray@doctorfowler.com](mailto:drray@doctorfowler.com)



[www.emergencymedicine.ws](http://www.emergencymedicine.ws)

*“the emergency medicine website”*

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*Thank you for your  
kind attention!*



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