

Friday Night [under the] Lights...

2016

Happy Friday...

As you know, I do my best to remind you of annual celebrations and holidays as they come around.

Well, thanks to Lynn White [AMR National Director of Clinical Practices] I'm excited to announce a wonderful week long celebration starting this Sunday!



I know you'll join the American Association of Endodontists in the tenth anniversary celebration of Root Canal Awareness Week, March 27 - April 2, 2016. It's really exciting.

Root Canal Awareness Week is a national effort to raise awareness of endodontists, so that patients and general dentists know to contact a specialist when root canal treatment is needed. It is an excellent time to explain the important role endodontists play in dental health, and to teach the public that root canals should not be feared.

Frankly, I'm surprised any one still has fears about root canals. *Really?*

It's just a simple procedure of drilling too deep into your teeth to expose the nerve, grab it – rip it out bit by bit and then use a whole tray of sharp objects to get every remaining piece.

Simple as that. How bad can that be? It strikes me that the dental simulation model I shared in the last issue of FNuL helps our colleagues learn how to do that procedure. Remember that?



Nice. This kind of training technology should make us feel very comfortable about root canals. Look how happy it is.

So, there you have it. Enjoy the celebrations of the week... Might be a good reminder to crank back up on the flossing as well...

◆ **Physics and medicine...** ◆

So my son Brandon & I went to see Diamond Rio at the Austin Rodeo earlier this week. Brandon knows more about Country Music than I could ever hope to. He actually knew more of the Diamond Rio songs than me. The cool part about the concert was we had some time beforehand to wander around the rodeo and watch some of the competition. It's quite an experience if you've never been.

Now, I'm not the kind of guy that lives to go to the rodeo each year. I don't block the days and do the countdown on my calendar. I actually don't have any shirts that snap or have different fabric on the shoulders than the rest of the shirt.

Plus, I could never do what the rodeo athletes and competitors do. Every cow looks the same to me (pre-steak). I still need to work through the logistics of how chicken eggs are fertilized and the idea of a pig winning first prize for looks is a bit of a struggle.

That said, the rodeo is a blast. Turns out it's one of the strongest supporters of childhood agriculture education and the athletes themselves are phenomenal. If you've never seen a pig race, you're missing out on a big chunk of life.

Not to mention the food. You can get just about anything under the sun fried (Oreos, for example). If it can go on a stick, it's available and any food item that only requires flour, sugar and hot oil to make is game.

Cardiologists should be very grateful for rodeos...

So where am I going with this?

One of the competitions is the Bull Riding event. Brandon & I had an opportunity to catch it.

You know what it is – essentially, a highly trained (and I’m guessing multi-fractured) bull rider climbs on what will become a very angry, huge, aggressive bull and try and hold on with one hand while the bull does everything in its massive power to throw the rider.

(If you want to know why the bull becomes so angry and wants to immediately and forcefully get rid of the rider, you’ll have to google it – I had no idea until I moved to Texas. I can see the importance of their sense of urgency).



But the sport has made some changes in the past few years. I noticed as soon as the first rider came out of the gates...

They now wear helmets. Not everyone, but most.

While most of you reading this know exactly how critically important that is, the sporting world still struggles a bit with that balance of protection and sport. It has not been a requirement in an extremely high risk sport.

Dale Butterwick from the University of Calgary found that there were 49 catastrophic injuries at rodeos from 1989 to 2009 which led to 21 deaths. Riders, especially bull riders, get injured or die at a higher rate than athletes in any sport, and a rider can be compared to a mostly unprotected quarterback facing an 1,800-pound lineman.



There’s a renewed interest in the topic of concussions from all sports since the release of the Will Smith movie **Concussion**. As we better understand the devastating long term consequences, it becomes critical that we increase our efforts to find ways to prevent concussions.

A few scary facts:

- There are between an estimated 1.6 and 3.8 million sports-related concussions in the United States every year leading The Centers for Disease Control to conclude that sports concussions in the United States have reached an epidemic level.
- High school athletes sustain an estimated 300,000 concussions per year.

- A 2012 study of 20 high school sports reported that 13.2% of all injuries in the sports studied were concussions, two thirds (66.6%) in competition and one-third (33.4%) during practice.

- According to the C.D.C., during 2001-2009, an estimated 2.7 million children aged ≤ 19 years were treated annually in emergency departments for sports and recreation-related injuries. Approximately 6.5%, or 173,285, of these injuries, were traumatic brain injuries, including concussion.

- For young people ages 15 to 24 years, sports are the second leading cause of traumatic brain injury behind only motor vehicle crashes.

- High school football is consistently shown in studies to be the sport with the greatest proportion of concussions (47.1%) and the highest concussion rate (6.4 concussions per 10,000 athletic exposures).

- At least one player sustains a mild concussion in nearly every American football game.

We in emergency, trauma and critical care have an obligation to inform our patients any chance we get about the potential devastation associated with head trauma. It's yet another one of the injuries that's best addressed by prevention.

Unfortunately, we often see the end result – we have perhaps the most credible platform for education and advocacy. Don't miss any chance you get to push the message...

◆ Some help with the physics...◆

So here's one more fascinating component of helping to better identify and manage patients at risk for concussion or spinal injury. Take a look at this stuff... I bet you weren't aware of it (I wasn't)...

The first is a device called ICE Dot...

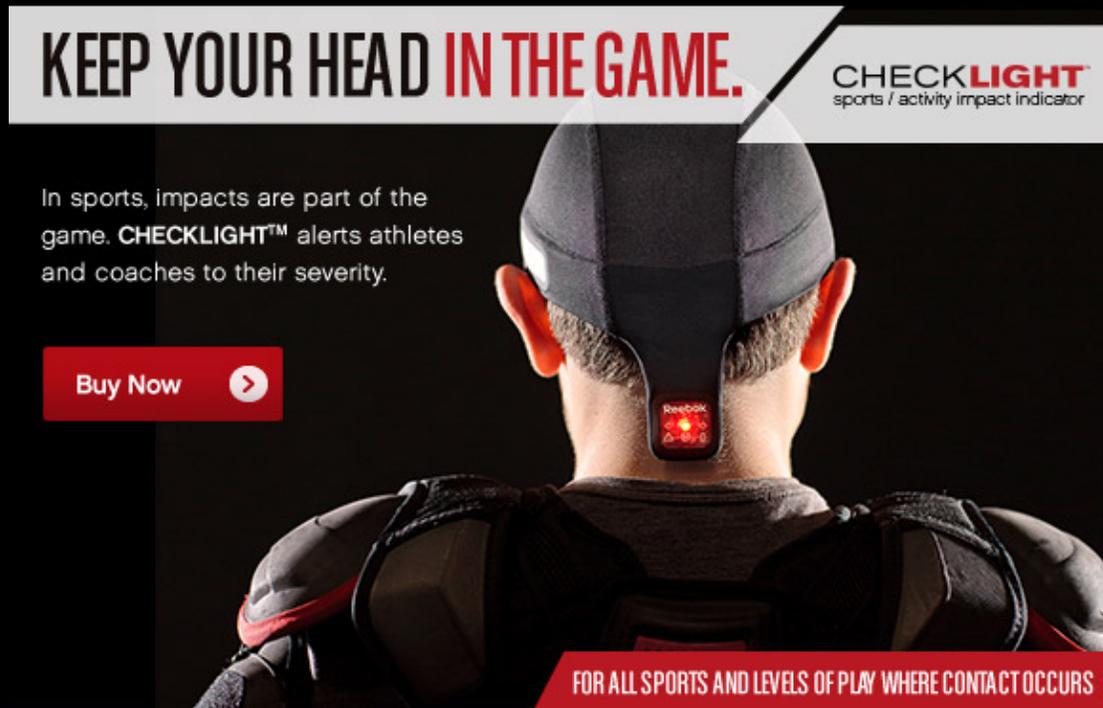


The ICEdot Crash Sensor is attached to a helmet. It detects major head impacts and notifies your emergency contacts if you are unresponsive. The company markets the technology for peace of mind (I almost typed "piece of mind" which would be a huge Freudian slip) in solo athletes.

When impact is detected, it can notify contacts, 911 and transmit GPS location and any additional health or contact data associated with the wearer.

They have started a sticker identification campaign to help notify emergency responders of the presence of the technology. We may be seeing more...

The next is technology called CheckLight.



KEEP YOUR HEAD IN THE GAME.

CHECKLIGHT™
sports / activity impact indicator

In sports, impacts are part of the game. **CHECKLIGHT™** alerts athletes and coaches to their severity.

[Buy Now](#)

FOR ALL SPORTS AND LEVELS OF PLAY WHERE CONTACT OCCURS

Checklight is an impact warning system. Essentially, the Checklight is not a concussion predictor or preventer. Because every athlete is different, some can sustain more severe blows with little to no occurrence of symptoms, while others aren't so lucky.

Checklight uses specific algorithms to measure G-forces (forces acted upon the body as a result of gravity). By measuring these forces, the Checklight gives you three clear understandable criteria for impact severity.

When an impact occurs, immediately the Checklight provides feedback. A green light means a less severe hit, a yellow light indicates moderate, and a red light warns of a more severe impact. No light being illuminated indicates no questionable impacts have occurred. The lights aren't a concussion predictor, but they do give parents and coaching staff reasons to check the impact data of their players and children to ensure safety. Any player who sustains a hit that registers a yellow or red light should be examined by a trainer or doctor to ensure that returning to play is safe.

It's yet another way to identify the potential and intervene earlier.

Finally, my son Harrison sent this last one to me...



It's a suit with a self-contained deployable airbag when subjected to impact. The manufacturer believes it has significant potential to decrease injury after an impact on a motorcycle.

Fascinating.

Bottom line, concussions are a significant problem for us with devastating long term consequences. It's really important for us to keep up with the evolving principles and technology associated with these patients...

◆ The power of a Blink... ◆

One of the most enjoyable parts of what I do is meeting new people all over the country. Sounds cliché, but I really do love it.

So I have to tell you a hilarious story about one of those meetings...

Yesterday, Bruce Lee, Todd Pelletier and I were standing outside the Emergency Department Ambulance entrance of a hospital in the bay area talking to the Director of Stroke Services.

Bruce, Todd & I were wearing standard issue business stuff – Sport Coat, button down – you get the picture. We were all holding our notepads. The Stroke Director was wearing her scrubs and a labcoat.

The ED was obviously pretty busy – Multiple ambulances coming and going.

So, as we were standing there, an AMR crew that none of us knew with a patient on their stretcher unloads, walks past the four of us talking, turns and says “JCAHO here today, eh?”.

It was funny because JCAHO is a term that refers to The Joint Commission – the powerful standard setting body that reviews and accredits hospitals nationwide. The Joint Commission announces they are coming to inspect your hospital the morning of the inspection. Because funding is dependent on successful accreditation, there is significant anxiety associated with any visit (for good reason). When they descend on the hospital, there are apparently many people in suits talking to people in lab coats.

I guess our little outdoor gathering conjured up an image.

That medic is a guy named Logan Jackson. He works at AMR San Mateo.

We stuck around waiting to meet him because his comment was so funny. He came out and we introduced ourselves.

We literally spent maybe 2 or 3 minutes talking to Logan.

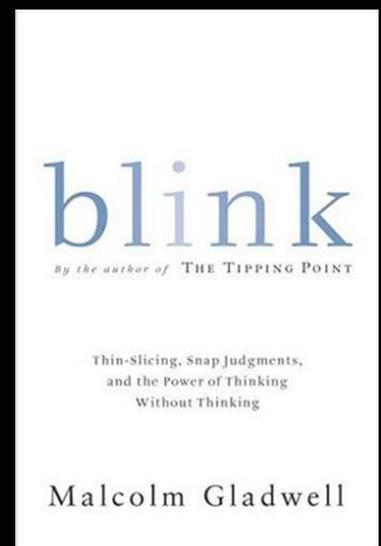
But as we walked away, all three of us had reached a similar conclusion after talking to him for literally seconds – What a great guy he was and how lucky we were to have him as an AMR colleague. I'm not talking about a simple "he was nice". I'm talking about all of us commenting about his attitude, passion for EMS, desire to collaborate with his peers and the Fire Department in the system and more. We all felt his commitment to what he did, even though we never talked specifically about that. There was literally not enough time in our brief encounter for all three of us to draw all those conclusions based on conversation alone. The encounter was way too short.

How does stuff like that happen?

If you've never read the book "Blink" I would strongly recommend you do. It's a fascinating read that describes how human beings use a powerful analytical tool that we aren't even aware of. It functions at our subconscious level. The author describes case after case, study after study and situation after situation where we draw a conclusion about something in a very, very limited time. We "thin slice" everything we're seeing and hearing very quickly – body language, voice inflection, expressions, tone and a ton more – and our subconscious mind assembles all those variables very accurately to give us an impression.

If you think about it, it makes perfect sense. Our colleagues in 911 Communications remind us that people can "hear" a smile. That's the kind of data point our subconscious recognizes and analyzes.

That's why things like Speed Dating work. It's why we should learn to trust our "gut feeling" ("I'm not sure what's wrong with him, but he looks really, really sick – grab the airway bag just in case").



“I knew we’d be back to this house tonight”. It’s not based on the patient telling you that, it’s your subconscious data base processing everything you saw and did and concluding that all those variables match up to similar scenarios where indeed, you were back.

Blink argues that “You had me from hello” is based in science, fact, experience and is an accurate representation of an encounter based on little, but extraordinarily valuable, detail.

So is “I knew he was a jerk the second he opened his mouth”.

It’s one of the reasons really sick patients feel such an overwhelming sense of relief when you arrive.

It’s the basis of our sense of concern and caution in certain EMS situations. Ever called for Law Enforcement because something *just didn’t feel right*?

We should never underestimate the power of ‘the first impression”, not only the information we subconsciously gather and process to reach a conclusion about a person or situation, but the messages we send ourselves and what conclusions others may draw about us in a very short, limited but critical time.

I’m actually re-reading the book now. It fits EMS (and life, for that matter) really well...

The science suggests we should “trust our gut” more often. We get important clues in every single interaction we have. Powerful clues that send a very accurate message. The information we process in that way may be more accurate than a full blown analytical approach in many circumstances.

I’m glad we had a chance to meet Logan. I trust my Blink. And we’re really glad he’s one of us...

♦ One of the Top 14 most influential women in EMS... ¶

The screenshot shows the EMS1.com website interface. At the top, there is a navigation bar with the EMS1 logo and menu items: HOME, NEWS, PRODUCTS, VIDEOS, TOPICS, COLUMNS, TRAINING, JOBS, OFF-DUTY. Below the navigation bar is a search bar and social media icons. The main content area features a featured article titled "14 of the most influential women in EMS" by EMS1 Staff, dated Mar 23, 2016. The article text reads: "As we continue to celebrate Women's History Month, here are 14 women leading and strengthening EMS in the United States and around the world. Women's History Month, celebrated each March in the United States, highlights the contributions of women to events in history and society. Seven inventions by women make our lives in the fire and EMS industry easier, safer and more efficient. Women have also led the way on seven important EMS-specific innovations. Our recognition and celebration continues with 14 of the most influential women in EMS." To the right of the article is a sidebar with "EMS ADVOCACY" sponsored by NAEMT (National Association of Emergency Medical Technicians) and a section for "EMS ADVOCACY ARTICLES" listing items like "EMS death benefits bill passes in Ky. House" and "Inside EMS Podcast: How to provide...".

Two days ago, EMS-1 recognized their list of the 14 most influential women in EMS...

It's an extremely impressive group of female leaders that have taken our profession to a new level. They are unique in their style, their interests and backgrounds.

And while they are all superb, there's one that's near and dear to our heart. Lynn White (you may recall she alerted us to National Root Canal Week...).

As our National Director of Clinical Practice and the guardian angel of resuscitation practices in AMR, Lynn has helped not only the 26,188 of us in AMR, but she is internationally respected as a leader, scientist, researcher and keeper of the Compass pointing to True North.

I'm really proud of what she does and how she does it. Our patients and our profession are better off, thanks to Lynn.

Strong work...

◆ A glimpse at the World of AMR ◆

Tonight's glimpse is courtesy of Brian Eveleth [AMR Clinical Practices – Cheyenne, Wyoming]. Notice that the star of life snake and staff is replaced with Steamboat the Wyoming raised famous bucking bronco. Pretty neat.



And I noticed something else about the image.

Look how high the chassis is raised on the wheels.

Wonder why they do that in Wyoming??

Oh yeah.

◆ WTH? ◆

Tonight's WTH is courtesy of Sabrena Collins [AMR Innovative Practices East Region).



Remember - In case of tornado – head to the Women's rest room.

◆ Epilogue ◆

There were 11 people – nine men and two women – hanging onto a rope that came down from a helicopter.

They all decided that two people should get off, because if they didn't, the rope would break and everyone would die.

No one could decide who should go, so finally, the women gave a really thoughtful and heartfelt speech together saying how they would give up their lives to save the others, because women were used to giving up things for others and not receiving anything in return. In a powerful and passionate ending to the speech and a message of their selflessness and willingness to save the others, they announced they would drop the rope.

As soon as they finished speaking, all the men started clapping...



So, that's it from my world. *Happy Friday.*

Wear your helmets. Remind your patients. Trust your gut.

And floss.

Ed

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