



SAVING LIVES - REDUCING RISK

From The Editor

First let me say that the folks at TSG are looking forward to seeing our friends and colleagues at the ACEP Scientific Assembly and at ASHRM. Please come and see us at **Booth #507** at ASHRM and **Booth #1015** at the ACEP Scientific Assembly.

For those attending the ACEP Scientific Assembly, we invite you to come and see the new TSG documentation solution

to the workflow problems and inefficiencies of medical record creation in **enterprise health records**.

If you are already on a fast boutique EM system, you have this covered. For those who are not, we have created an extraordinarily fast medical record, designed to assist scribe-generated dictation; it's loaded with risk, safety and clinical decision support, a medical decision-



making text library, and much more. The type of support and logic discussed in the case below is built into the system. We will be demonstrating the new program at **Booth #1015** at the Scientific Assembly. ■

Let's move on then to a heartbreaking story of medical error that resulted in the death of a young woman named Jess as a result of the failure to diagnose Long QT Syndrome (LQTS).

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This patient history comes to TSG through Doug Wojcieszak from Sorry Works! Thanks to Doug and Jess's family for giving TSG permission to tell Jess's story so that others can be saved. Sorry Works! published this story with a focus on Disclosure & Apology. I found that the case history contains key lessons

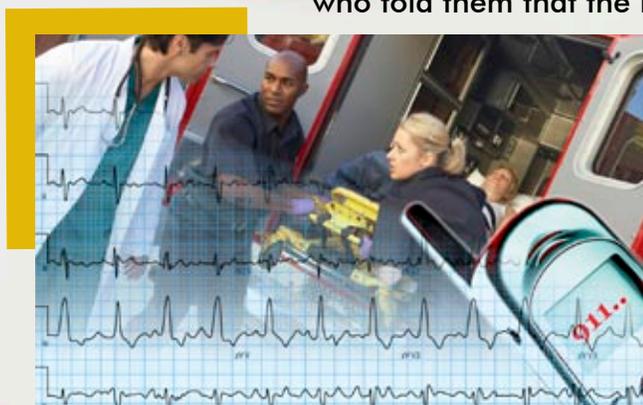
for multiple medical specialties, as you will see below. The focus of this newsletter is LQTS in the pediatric population.

This is Jess's Story

At around 12 years of age, Jess started passing out. Jess's mother was frightened during these episodes, as Jess would become dizzy, fall to the floor, turn blue and pass out. Jess's mom frequently called 911 to take Jess to the local emergency department. No diagnosis was made in these early months.

Jess and her mom visited a children's hospital and saw a neurologist. The neurologist diagnosed epilepsy. The basis for that diagnosis is not clear from the facts that are available. A year later, following several additional episodes or spells, the neurologist told the family that it was not epilepsy, but did not offer an alternative diagnosis. They went home following that visit with no answers.

These spells went on for a few more years with lots of emergency department visits. Again, no one offered a logical explanation.



When Jess was in the 10th grade, her grandmother read something about LQTS. Based on what she read in the article, she mentioned to the family that QT syndrome may look like a seizure, but was actually an underlying heart abnormality.

Jess's mother asked the neurologist about LQTS; he replied that there was no way this was LQTS. There was no further discussion.

Following another spell, Jess was transported to an outlying hospital where a physician read Jess's ECG as showing LQTS. The ECG actually contained the phrase "long QT syndrome" in the auto-interpretation. The family took the ECG back to her neurologist, who told them that the ECG was wrong.

There was no further discussion.

Frustrated, the family switched neurologists. When they asked for a referral to cardiology, the neurologist expressed that he

was not happy about providing the consultation. He did order the consult, as he felt the family needed to release this thought process and get over it. Jess's mother describes the physician as condescending.

The cardiologist ordered a stress test, Holter monitor, echocardiogram, and another ECG.

He told the family that all test results were negative and there was no LQTS. Mom argued with the cardiologist and mentioned the one positive ECG from the outlying hospital. The cardiologist disagreed – end of discussion.

Jess continued to faint through grades 11 and 12. She once again met with the neurologist, who said he could do nothing more. He said Jess should go home and learn how to breathe through a spell. He told mom to stop wasting money on ambulances.

10 months later, Jess died of Long QT Syndrome.

Brief Review of Long QT Syndrome in the Pediatric Population

- LQTS is a disorder of myocardial repolarization, characterized by a prolonged QT interval on the ECG and an increased risk of sudden cardiac death.
- The syndrome is associated with an increased risk of a characteristic life-threatening cardiac arrhythmia - torsades de pointes - but other arrhythmias occur.
- The primary symptoms in patients with LQTS include palpitations, syncope, seizures and cardiac arrest.
- LQTS may be congenital or acquired. There are 13 distinct genetic types. The

Online Disclosure & Apology Training *Empathy Without Admitting Fault*

The Sullivan Group and Sorry Works! formed a partnership to develop online disclosure and apology training courses for healthcare organizations.

The first course, titled **Just-In-Time/Introductory**, is a 12-minute video that provides 10 key tips to understand how to empathize and stay connected post-event without prematurely admitting fault. Included with the 10 tips are two brief scenarios that show disclosure meetings. This 12-minute video will help all staff understand the basics of disclosure, and it can be a refresher for any staff member who needs a quick review before meeting with an upset patient or family. This short course should be required training for existing clinicians in your organization as well as a part



of your onboarding process for new hires and new practices.

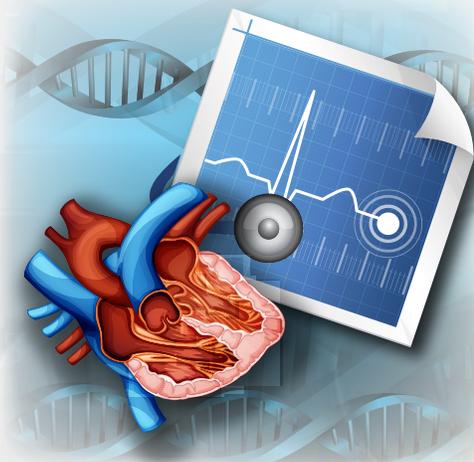
The second course, titled **Disclosure and Apology Fundamentals**, provides an in-depth overview of disclosure, including how to get connected with patients and families pre-event and how to stay connected with them post-event with empathy and great customer service. Sample scripts for post-event discussions, lists of “dos and don’ts,” and case scenarios are provided in the course. Also, videos are embedded throughout the text covering disclosure role-play scenarios and commentary. It’s a very comprehensive disclosure training course!

If you are interested in learning more about Online Disclosure & Apology Training, please contact: Brant Roth at broth@thesullivangroup.com

diagnosis is often made through genetic testing of the family.

- The QT interval varies inversely with the heart rate: therefore, the QT measurement is adjusted for the heart rate, resulting in the corrected QT interval, or QTc.
- The QT interval and other ECG features of LQTS may vary with activity and time of day. Therefore, the absence of LQTS on one ECG is not diagnostic.
- The normal range for the rate-corrected QT interval is similar in males and females from birth until late adolescence (0.37 to 0.44 sec).
- This interval is typically automatically calculated on the ECG. The QT interval is measured for 3 to 5 consecutive beats and averaged.

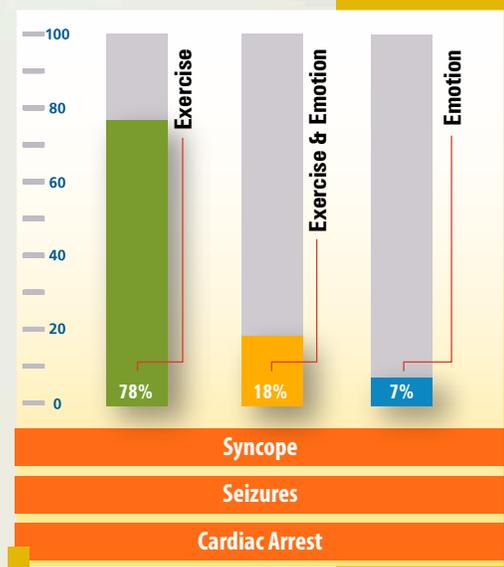
Interestingly and surprisingly, multiple formulas have been proposed for the QTc correction without universal agreement as to which formula is optimal. Also, studies demonstrate that QTc intervals will vary in the same patient based upon use of ECG machines from different manufacturers.



Furthermore, there remains controversy over the leads that should be used, the method of correction for heart rate, and the limits of the normal range. Although practitioners assume that the typical 12 lead provides accurate interpretation of intervals, there is not universal agreement over analysis of the QT interval on several fronts.

One study of 287 patients younger than 21 years demonstrated the following:

- Mean age of presentation was 6.8 years.
- 36% presented between the ages of 9 years and 15 years.
- The most common presenting symptoms were syncope, seizures and cardiac arrest.
- Among symptomatic patients, symptoms were related to exercise in 78%, exercise and emotion in 18%, and emotion alone in 7%.
- Family history was positive for LQTS in 39% and for sudden cardiac death in 31%.



Discussion

TSG has not focused specifically on Long QT Syndrome in the past, but this story is compelling and has important messages for many practitioners.

What follows is a summary of what went wrong in this case based upon the facts disclosed during the process of litigation and a **cognitive autopsy** by Jess's family and this author. The cognitive autopsy is an evaluation of the human thought process that demonstrates how bias and subjective thinking cause cognitive detours and medical errors. Anything in quotes below comes directly from Jess's video.

You can view this compelling story and follow the analysis on YouTube at: <https://www.youtube.com/watch?v=t6mr3gxXx64>

1 The physicians misread 5 of 7 test results.

- 2 "The head guy told the heart guy that I didn't have LQTS and then he didn't try to find it." That is directly from Jess's video link. The point is that the neurologist did not believe this was LQTS and communicated that to the cardiologist. That communication created a bias - a preconception in the mind of the cardiologist that there would be no QT abnormality. That cognitive bias resulted in both misinterpretation and, incredibly, a failure to evaluate some of the tests until after Jess's death.
- 3 The Holter monitor test was not interpreted until more than a year after Jess died.
- 4 Some tests were missed or not interpreted because of misplaced paperwork.
- 5 Also from the video: "Selective thinking and cognitive bias prevented Jess from seeing her 16th birthday. Judgments and biases affect all humans, even physicians, and need to be considered in making a diagnosis."
- 6 The family sued and won, but never saw the changes made in the medical system that were needed to save lives in the future.
- 7 "Doctors need to listen to their patients, **REALLY listen** to their patients."

Discussion and Recommendations

- 1 Syncopal episodes due to LQTS may have tonic-clonic movements; this often leads to a misdiagnosis of a primary seizure disorder. Non-specific or non-diagnostic changes in the electroencephalogram often reinforce that thought process.
- 2 The initial presentation of LQTS is frequently syncope or seizure. In those patients, a careful analysis of **context** is critical. If the spell was preceded by emotional stress or physical exertion, LQTS should be considered in the differential diagnosis.
- 3 Clinical decision support (CDS) can help. Emergency physicians, primary care physicians, neurologists and others may not be connecting the critical dots in the midst of the demands and pressures of a clinical shift or consultation. LQTS logic should be incorporated into the medical record. Practitioners should conduct patient evaluation according to evidence-based or best evidence algorithms. Patients under 21 with syncope or first-time seizure should be questioned about what preceded the event. Use your medical record to assist in this analysis. Simple logic could generate a reminder for the practitioner to consider LQTS and save a life.

- 4 Similarly, CDS should offer up key family history considerations in pediatric patients with this presentation. Once again, it is a mistake to rely upon human memory to try and remember that it is important to review family history specifically for LQTS in these cases.
- 5 LQTS should be included in the differential diagnosis of syncope and seizure in pediatric patients. The practitioner should have an opportunity to actually view a differential diagnosis, not try and conjure up such a list from memory.



Viewing a differential diagnosis is a well-established debiasing technique; it can help avoid anchoring on a diagnosis too early (e.g., vasovagal

syncope) and prematurely closing the clinical decision-making process.

- 6 Consider a screening ECG in all pediatric patients following a first afebrile seizure or unexplained syncope, including episodes consistent with vasovagal syncope. Those with borderline or prolonged QT intervals should be referred to a cardiologist.

and clinical decision support
inside electronic medical

7 Remember that the QT segment can vary based upon circumstances; if there is a significant degree of suspicion, early referral for further outpatient testing may be lifesaving.

"Practitioners must recognize that cognitive bias is at the root of medical error and adverse outcomes in many failure to diagnose cases."

records may have saved Jess's life. Practitioners must recognize that cognitive bias is at the root of medical error and adverse outcomes in many failure to diagnose cases.

Recognition of this fact and a proactive approach to build decision support into the medical workflow is paramount. ■

Thank you. And as always, please feel free to contact us. We appreciate your thoughts and feedback.

Garson A Jr, Dick M 2nd, Fournier A, et al. The long QT syndrome in children. An international study of 287 patients. *Circulation*. 1993; 87:1866.

Li H, Fuentes-Garcia J, Towbin JA. Current concepts in long QT syndrome. *Pediatr Cardiol*. 2000; 21:542.

Moss AJ. Long QT Syndrome. *JAMA*. 2003; 289:2041.

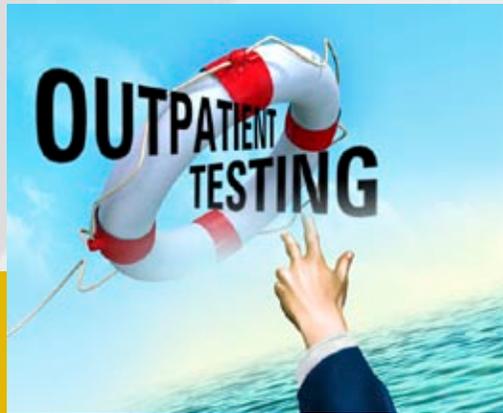
Moss AJ, Schwartz PJ, Crampton RS, et al. The long QT syndrome. Prospective longitudinal study of 328 families. *Circulation*. 1991; 84:1136.

Jackman WM, Friday KJ, Anderson JL, et al. The long QT syndromes: a critical review, new clinical observations and a unifying hypothesis. *Prog Cardiovasc Dis*. 1988; 31:115.

Pacia SV, Devinsky O, Luciano DJ, Vazquez B. The prolonged QT syndrome presenting as epilepsy: a report of two cases and literature review. *Neurology*. 1994; 44:1408.

Pfammatter JP, Donati F, Dürig P, et al. Cardiac arrhythmias mimicking primary neurological disorders: a difficult diagnostic situation. *Acta Paediatr*. 1995; 84:569.

Singh B, al Shahwan SA, Habbab MA, et al. Idiopathic long QT syndrome: asking the right question. *Lancet*. 1993; 341:741.



Conclusion

Thanks again to Doug Wojcieszak, Sorry Works!, and Jess's family for giving TSG permission to tell this story. It is indeed tragic, but perhaps raises some signposts for system solutions that will save lives. In this case, system solutions related to the flow of paperwork, diagnostic testing analysis,

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- ➔ Handoffs, Transitions & Discharges: Key Moments in Patient Care *(updated with videos added)*
- ➔ Information Security Tips for Healthcare Professionals
- ➔ Workplace Violence in the Healthcare Setting

Ultrasound

- ➔ Ultrasound at the Bedside in the Emergency Department
- ➔ Ultrasound of the Abdominal Aorta

Click on the course name to see the course description.

Placental Pathology Two-Part Course Series

TSG is pleased to announce the release of a two-part course series on Placental Pathology. Offering up to four hours of study, these online courses explore this unique organ that serves as lungs, kidney, and liver during fetal development. It is often under-appreciated by clinicians, both for what it does during pregnancy and for the information that can be derived from it after delivery. A knowledgeable placental evaluation can reveal evidence of infection and ischemia as well as the timing of these conditions; such evidence may be extremely important to the infant's care providers and may help an obstetrician defend the quality of care given should it be challenged later on in the medical-legal arena.

Moreover, ongoing research is pointing to early placental events as etiologic factors for conditions as common yet diverse as preeclampsia, placenta accreta, and intrauterine growth restriction. Treating neonatologists and pediatricians can learn much about the etiology of unusual clinical findings in a newborn from careful placental analysis.

Specifically, after completing these courses, practitioners should be able to:

- Assess the value of placental pathology in the medical-legal arena.
- Identify important features of the placenta that can be examined at delivery without specific pathologic training; identify the indications for placental pathologic examination.
- Justify the value of performing & recording a careful and complete examination of the placenta immediately after delivery.
- Investigate the etiologies of placental pathology in relation to the intrauterine environment connection between the immune systems of the mother and the fetus.
- Hypothesize how a placental pathology examination and report can be of benefit in a medical-legal case. ■

TSG Fall Conference Information

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Dan Sullivan
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Patient Satisfaction

Doug Finefrock
DO

TSG Faculty Presentations

Dan Sullivan, MD, JD, FACEP

- 1** **Rapid Fire: Is There a Doctor in the House? Your Responsibilities & Liabilities When Providing Care Outside the ED**
Mon., Oct. 27 @ 1:30 p.m.
- 2** **"Oh My Aching Head": High Risk Neuro**
Tues., Oct. 28 @ 10:00 a.m.
- 3** **Speaking Like a Pro**
Tues., Oct. 28 @ 3:30 p.m.
- 4** **Medical Liability in the Age of Electronic Health Records**
Weds., Oct. 29 @ 8:00 a.m.
- 5** **Critical Care & Critical Timing Requirement in the ED: What's Your New Liability?**
Weds., Oct. 29 @ 3:30 p.m.

Doug Finefrock, DO

- 1** **Are Your Patient Satisfaction Scores Driving You Mad? The 12-Step Program to Improving Your Patients' Experience & YOUR Satisfaction**
Tues., Oct. 28 @ 12:30 p.m.
- 2** **Happy Patients, Happy Doctors: Improving Patient Satisfaction Decreases Your Liability**
Weds., Oct. 29 @ 8:00 a.m.
- 3** **Win-Win: How Improving the Patient Experience Improves Your Job Security**
Weds., Oct. 29 @ 10:00 a.m.



Patient Satisfaction Every Time

The **RSQ® Solutions - PatientSET™ Program** provides healthcare organizations with a scalable solution to improve clinician-patient communication, the patient experience, and HCAHPS.

Unlike other programs that rely heavily upon a top-down strategy, this comprehensive online training suite ensures that all clinicians are empowered with the interpersonal skills needed to positively impact their bedside manner. The **PatientSET™ Program** mirrors the **RSQ® Cycle** that has been proven to change clinical behavior and improve patient outcomes over the past 15 years.

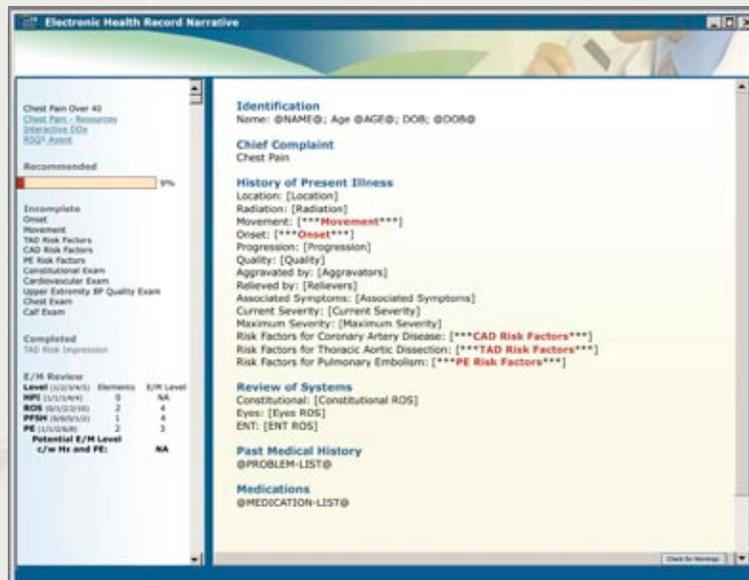


- PatientSET™ Education
- PatientSET™ List
- PatientSET™ Assessment

Struggling to Create Medical Records on Your Hospital's Enterprise EMR? We Have a Solution.

TSG has created a solution specifically designed to generate a medical record in any free text space on your Enterprise EMR.

- Chief Complaint specific guidance
- Designed for ED workflow (e.g., scribe mode)
- Unused elements automatically delete from the note
- Clinical decision support
- Medico-legally protective canned text
- Macro mode
- Risk and safety dashboard
- Billing calculator



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Patient Safety & Risk Management

Arnie Mackles
MD, MBA, LHRM



Disclosure & Apology

Doug Wojcieszak



Medical-Legal

John West
JD, MHA, CPHRM, DFASHRM

Industry Spotlight Session

Brant Roth
Doug Wojcieszak
Arnie Mackles, MD, MBA, LHRM

Empowering Clinicians with Risk, Safety Quality Solutions

Mon., Oct. 27 @ 12:40 p.m.

TSG Presentation

John West, JD, MHA, CPHRM, DFASHRM

Case Law Update 2014

Mon., Oct. 27 @ 3:00 p.m.

Join us at IMAC Dec. 2-4 in Cayman to learn more about RSQ[®] Solutions and new partnerships.

E-mail Brant Roth to schedule a meeting

broth@thesullivangroup.com

Meet Members of our RSQ[®] Collaborative

Emergency Medicine



Dan Sullivan
MD, JD, FACEP

XL Group's Bermuda Insurance Operations Partner with The Sullivan Group to Provide Clinical Risk and Loss Prevention Services to Healthcare Clients

On February, 11, 2014, XL Group's Bermuda Insurance Operations announced a new partnership with The Sullivan Group ("TSG"), one of the premier providers of clinical risk and loss prevention services to hospitals, physicians and nurses throughout the US.

Through this new partnership, XL Group's Bermuda Insurance Operations, XL Insurance (Bermuda) Ltd ("XLIB"), seek to align their portfolio of healthcare clients and prospective clients with TSG's mission of improving patient safety by reducing medical errors and lowering the frequency of malpractice claims.

Wesly Guiteau, Senior Vice President and Healthcare Practice Leader at XLIB, said: "We are pleased to have reached this agreement with TSG to provide our clients with first-class complementary risk management and online education services. For more than 27 years, XLIB has provided leading insurance solutions to this industry. This new partnership demonstrates XLIB's continuing commitment to our clients and it is part of a multi-prong effort to realign our platform with our clients' growing need for insurance products, including risk management support."

Read more... <http://bit.ly/1jW4d0W>

EBOLA Resources

EBOLA PUBLIC HEALTH EMERGENCY

In response to the Ebola public health emergency, the AHA has created an Ebola web page <http://www.accme.org/cme-addresses-ebola-emergency> with an education package for broad distributions to healthcare providers and institutions.

It includes:

- Informational PowerPoint: Ebola Facts
<http://www.accme.org/news-publications/publications/public-health-resources/ebola-facts>
- FAQ: Safe Management of Patients with Ebola Virus Disease (EVD) in US Hospitals
<http://www.accme.org/news-publications/publications/public-health-resources/faq-safe-management-patients-ebola-virus>