When the Worst Happens: Responding to Adverse Events and Medical Errors

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### Goals

- Medical errors/adverse events background
- Initial client communication
- Initial staff communication
- Follow up for the client
- ► Follow up in house
- Prevention tips for common events

### **The Situation - Fred**

- ▶ 12 yr MN DSH presents for chronic vomiting and diarrhea
- Endoscopy and colonoscopy is scheduled
- NG tube is placed for administration of Go-lytely
- Due to dehydration, IV catheter and fluids are also ordered
- Super busy day Go-lytely is hooked to IV catheter and 20 ml delivered before mistake is realized

### **Medical Error**

A commission or omission with potentially negative consequences for the patient that would have been judged wrong by skilled and knowledgeable peers at the time it occurred, independent of whether there were negative consequences

### **Medication Error**

Medical error involving a medication

- Wrong medication given
- ► Wrong dose
- ► Wrong time
- ► Wrong route

## **Hospital Acquired Condition**

- Undesirable situation or condition that affects a patient and arose during a hospital stay
  - Medical error resulting in harm
  - Infection
  - Pressure ulcer
  - ► Falls

### Burns

### **Adverse Event**

- Untoward medical occurrence in a patient undergoing a treatment or receiving a medication which does not necessarily have a causal relationship
  - Preventable
  - Not preventable
  - ► Harm
  - No harm

Biddick, et al. A serious adverse event secondary to rapid intravenous levetiracetam injection in a dog. J Vet Emerg Crit Care 2018;28(2): 157.

## Overlapping



### Fred

- Medication error
- Medical error
- Adverse event
- Not sure if will develop into a hospital acquired condition

### To Err is Human

- 1993 Study medication errors responsible for 7000 deaths
- 2000 study 44,000-98,000 Americans die each year from medical errors

### Medicare patients hospitalized 2008

- 1 in 7 experienced an adverse event that caused harm
- 700 of 7905 surgeons (8.9%) participating in a survey reported a concern that they had made a major medical error in the last 3 months

### **Current State**

2016 British Medical Journal - Hospital medical errors have been reported to be the 3<sup>rd</sup> leading cause of death in the US (approximately 250,000) https://www.bmj.com/content/353/bmj.i2139

### **Veterinary Errors?**

- Kogan LR, Rishniw M, Hellyer PW, Schoenfeld-Tacher RM. Veterinarians' experiences with near misses and adverse events. J Am Vet Med Assoc 2018;252(5):586-595
  - Survey sent to 46,481 veterinarians from VIN
  - ► 606 responses
  - 73.8% reported involvement in at least one near miss or adverse event
  - Majority had some effect on their professional or personal life in the short term and 50.6% of those involved in an adverse event had a longer term negative impact

Front. Vet. Sci., 05 February 2019 | https://doi.org/10.3389/fvets.2019.00012





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- Adverse event reporting 3 hospitals (Cornell small animal, large animal, specialty hospital)
- Incident rate 5 out of 1000 patient visits
- 560 reports 15% resulted in harm, 8% resulted in permanent harm or death
- Medication errors most common
- Most likely UNDER count of all errors



### **Medical Errors**

### Impact is not just on the patient

Clients

- Opinion of primary care veterinarians
- Community
- Healthcare provider
- ► The organization as a whole

Open and honest conversation is crucial EARLY

### **Team Emotions**

### Feelings of the team after an event

- ► Scared
- ► Guilty
- ▶ Defensive
- Denial

## Six Step Framework

- 1) The patient should always come first
- 2) Notify the client right away
- 3) Support the healthcare workers involved
- 4) Investigate
- 5) Circle back to the client
- 6) Work to fix SYSTEMS internally

### The patient comes first - Fred

- STOP all fluid lines
- Aspirate the IV catheter
- Vital signs and nurse cage side
- POISON CONTROL
- Company phone number? Other experts? VIN?
- ALL Diagnostics recommended

## What if the patient has died

Post Mortem including histopathology

## Notify the Client Right Away

## What do you disclose – ethical complexity

Errors with no harm?

- Errors where the patient already had a grave prognosis?
- Other providers errors?

Gallagher, et al, NEJM, October 31, 2013



**Original Contribution** 

February 26, 2003

## Patients' and Physicians' Attitudes Regarding the Disclosure of Medical Errors

Thomas H. Gallagher, MD; Amy D. Waterman, PhD; Alison G. Ebers; et al

JAMA. 2003;289(8):1001-1007. doi:10.1001/jama.289.8.1001

FREE

- ▶ 13 focus groups
- ► 52 patients
- ► 46 physicians
- Saint Louis area

### Which Errors?

- Patient report they want to know ALL errors
- Doctors believe they should report ANY error that did or could have caused harm at any level

### What clients want with disclosure

- An explicit statement that an error occurred
- What the error was and the error's clinical implication
- Why the error happened
- How recurrences will be prevented
- An apology
- Sincerity and empathy

### **Disclosure Survey in Healthcare**

Survey of 4000 US/Canadian doctors in 2004 about disclosure

- "Choose their words carefully"
- Often do not explicitly identify the error
- Often do not discuss preventing recurrence
- Liability concerns make apology hard
- Only 10% thought hospitals supported them adequately after an error

## Agenda

- Review of the facts (do not speculate)
- Clear, honest communication of regret
- What steps are being taken to care for the patient
- What steps will be taken to investigate
- What steps will be taken to prevent recurrence
- Who will speak to the family next and when
- Close with sincere expressions of support, sympathy, concern

Healthpact and American Society for Healthcare Risk Management

### Word Choice

"I'm sorry for what has happened" NOT

"I'm sorry for what I did"

► Do not blame colleagues, the system

Do not use "buts"

However, be yourself and be genuine

## **Apology Fails**

- "I know for you this is unpleasant but for me it's shattering"
- "There was a mistake, but . . ."
- "I apologize for whatever happened..."

### Fred

- Medical Director contacted
- Owner informed by the doctor first.

### Liability Insurance

### Notify AVMA-PLIT PROACTIVELY

- Case report
- DOES NOT AFFECT YOUR INSURANCE RATES
- Can reimburse you and owner for costs

## **Mental Preparation**

- There may be anger, yelling, sarcasm
- You may not be forgiven
- They may request a different doctor
- You need to avoid "buts" while still being yourself and genuine for the conversation

### Disclosure "coaches"

- Available when an event occurs
- Don't lecture
- Role Play through the situation
  - "what will you say if the client says XX? Let's role play"

### Fred

" I have some news. Fred was inadvertently given the medication he was supposed to be given into one tube into his IV. We do not yet know the implications of this but we are going to do everything we can to make sure Fred is alright. Our medical director has been informed and we are supporting him and investigating currently. I am so sorry this happened."

"My main concern is making sure Fred is OK. Our medical director will follow up with you within XX time frame. I will call you as soon as I have more information on Fred's condition"

## Legal Ramifications

### In the human field

- Disclosure reduces intention to sue, promotes more favorable settlements
- Disclosure reduces the size of jury awards, discourages plantiff attorneys
- In 36 states in human cases, statements expressing apology, sympathy or compassion are not admissible as evidence if made quickly after an event (within 30 days in WA state – RCW 5.64.010)
- No veterinary laws
- "Empathize post-event. Do not admit fault until the review is complete"

## University of Michigan

### Full disclosure program

- Disclose all harmful errors
- Compensate patients quickly and fairly
- ► Five year experience
  - Annual litigation dropped to \$1 million from \$3 million
  - ▶ Time to resolution of claims dropped to 9.5 mo from 20.7 mo
  - Number of claims/lawsuits dropped to 114 from 262

### Financial

- "We are going to do everything we need to care for XX tonight"
- The medical director and practice manager have been notified and will be in contact with you tomorrow as soon as possible after reviewing the case

## Support the Healthcare Workers Involved



"Mistakes happen – main concern is learning so we can prevent in the future."

## Healthcare Providers are the second victim

- Emotional distress is common after involvement in adverse events and errors
  - Fear of criticism, litigation, lack of support from the institution
  - Anxiety
  - Self-doubt perfectionists, idealists

## Isn't the Healthcare worker ever to BLAME

Did the worker cause harm deliberately?

- Was the worker drunk, high or otherwise impaired at work?
- Has the worker had a history of mistakes that can not be explained?
- Could another person in the same situation have made the same mistake?

### Healthcare Provider needs after errors

- Non judgmental opportunity to talk
- Reaffirmation of competence
- Reassurance of self worth
- Respect and Compassion

### Ergovet.com

#### Anthrozoös > A multidisciplinary journal of the interactions of people and animals

Issu

**Original Articles** 

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### Veterinarians' Emotional Reactions and Coping Strategies for Adverse Events in Spay-Neuter Surgical Practice

Check for updates

Sara C. White 🔽

Pages 117-131 | Published online: 17 Jan 2018

**Solution** Interstation Interst

**Original Articles** 

Veterinarians' Emotional Reactions and Coping Strategies for Adverse Events in Spay-Neuter Surgical Practice

Sara C. White 🔽

- Survey of 32 veterinarians in shelter spay-neuter practice
- Open ended questions about adverse events
- Four keys related to coping
  - Technical learning
  - Perspective and appraisal
  - Support and Collegiality
  - Emotional Learning



### Factors in Coping

- Technical Learning
  - Decrease future occurrences
- Perspective and Appraisal
  - Frame of reference one episode in how many overall animals helped
  - Overall scheme of the world
- Support and Collegiality
  - Speaking with other veterinarians
- Emotional Learning
  - Coping and resilience skills
  - Understanding would be a timeframe for recovery



### One of my most experienced nurses

Go-lytely is exactly the same color as IV fluids and was on a fluid line from a pump



### Investigate



### Actions

| Intervention                           | Level | Focus             |           |
|--|-------|-------------------|-----------|
| Eliminate risk                         | 8     |                   | Effective |
| Forcing function or<br>Constraints     | 7     | ←<br>Svstem       | 4         |
| Automation                             | 6     | Focused           |           |
| Standardization or<br>Protocols        | 5     |                   |           |
| Checklists or Double-<br>check systems | 4     |                   |           |
| Rules or Policies                      | 3     | ←                 |           |
| Education and<br>Information           | 2     | People<br>Focused | Effective |
| Suggestions to be more careful         | 1     |                   |           |

## **Closing holes in the Swiss Cheese**

Food coloring added to all fluids given through a NE, NG tube

Able to show the owner what happened and what we did to make sure it won't happen again.



### Follow up conversations



- Event analysis
- Prevention plan
- Patient questions
- Compensation/payment
- Timing is crucial
  - Minimize time between the first and the second discussion

### Circle back to the Client - Fred

- No charge for the entire hospitalization or visit
- Followed bloodwork recommendations and observations as recommended by everyone we contacted
- Ended up with no ill effects or ramifications
- Owner did continue to be our client and endoscopy was performed at a later date

Ann Pharmacother. 2004 Jul-Aug;38(7-8):1183-5. Epub 2004 Jun 1. Unintentional intravenous infusion of Golytely in a 4-year-old girl.

<u>Rivera W<sup>1</sup></u>, <u>Velez LI</u>, <u>Guzman DD</u>, <u>Shepherd G</u>.

**Author information** 

#### Abstract

#### **OBJECTIVE:**

To report an accidental intravenous infusion of Golytely (polyethylene glycol and electrolyte solution; PEG-ELS) in a pediatric patient that did not result in systemic toxicity.

Send to

#### CASE SUMMARY:

A 4-year-old Hispanic girl presented to the emergency department after ingestion of approximately 24 tablets of 6-mercaptopurine (6-MP) 2 hours earlier. She vomited twice after receiving syrup of ipecac at home. Upon arrival, her vital signs were temperature 36.2 degrees C, heart rate 102 beats/min, respiratory rate 42 breaths/min, and blood pressure 115/67 mm Hg. Her physical examination was normal. The patient received activated charcoal 1 g/kg. Golytely administered through a nasogastric tube was ordered. Upon reevaluation, it was noted that the patient had received 391 mL of Golytely intravenously. The infusion was immediately stopped. There was no evidence of acidosis, renal failure, or ethylene glycol toxicity. She was admitted for observation and was discharged 36 hours later.

#### CONCLUSIONS:

When administered correctly, an infusion of PEG-ELS by nasogastric tube is a safe gastrointestinal decontamination technique used in toxicology; PEG-ELS is not indicated for intravenous administration. Protocols need to be implemented in the workplace to minimize errors in the delivery of treatment to patients. Fortunately, this patient did not have any toxicity from the intravenous infusion of Golytely.

### Fixing SYSTEMS internally

### Patient Safety Framework



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### Prevention: Identify problems

Adverse events and medical errors are under reported

- "Walls of silence"
- Blame, shame, fear
- Definitions are fuzzy
- Systems for reporting within hospitals are often unclear
- Synthesizing and saving reports for further learning is done rarely

# Encourage and study things gone wrong

- Protocol and system for reporting adverse events
  - ALL events not just what is bad (learn from your NEAR MISSES)
  - Make it EASY google forms, other
  - Provide learning, teaching, positive change NOT blame

### Patient Safety Report - Seattle and Renton

This form is intended to document medical errors, adverse events (treatments causing unintended patient harm), near misses (pitfall encountered but caught before adverse event occurred), or communication errors.

Please understand, voluntary reporting of ALL events, medical errors, near misses, and circumstances that may increase the risk of harm to patients is encouraged - this will help us as a team identify processes that are unsafe and help us find ways to make our treatment better. This report is for quality assurance purposes only; all reports are confidential and should not be included in the medical record. Please complete all sections and submit for review.

Thank you for contributing to our continued improvement!

\* Required

Today's date \*

Date

mm/dd/yyyy

Date of Incident \*

Date

mm/dd/yyyy

Client Name \*

Your answer

Patient Name \*

Your answer

### **Medication Errors**

- Lahue BJ, et al. Am Health Drug Benefits 2012
  - Preventable adverse drug events involving injectable medications projected to be associated with 1.2 million hospitalizations annually
  - ▶ Insulin is one of the highest risk medications
  - Harm most from anti-infective, narcotic/analgesic, anticoagulant/thrombolytic, and anxiolytic/sedatives



## Common Adverse Events/Medical Errors

#### **Medication Errors**



### Heat Sources



https://www.seattledogspot.com/redmond-dogsuffers-fatal-burns-routine-dental-procedure/

### **Anesthetic Machines**



### Feeding tubes

### Placement not confirmed

- Damage/injury during placement
- Feeding/IV confusion issues

### Feeding tubes



Placement confirmation

Radiographs with doctor OK

► ETCO2

I got stomach juice when aspirated

► Food coloring!

### Is Progress really possible?

2010-2014 17% reduction in hospital acquired conditions

2014-2016 Further 8% reduction

## Reduction of Surgical Complications in Dogs and Cats by the Use of a Surgical Safety Checklist Vet Surgery 2016

Annika Bergström<sup>1</sup>, Maria Dimopoulou<sup>2</sup>, and Mikaela Eldh<sup>2</sup>

<sup>1</sup>Department of Clinical Sciences, and <sup>2</sup>University Animal Hospital, University of Agricultural Sciences, Uppsala, Sweden

- ▶ 300 surgery cases baseline
- 220 surgery cases post implementation

|                             | Pre-checklist | Post-checklist | P Value  |
|-----------------------------|---------------|----------------|----------|
| Total<br>Complications      | 52/300        | 15/220         | P=0.0003 |
| Surgery site infections     | 14/300        | 3/220          | P=0.045  |
| Wound healing complications | 14/300        | 1/220          | P=0.0006 |

### Systems and Manufacturers





https://vetidealist.com/mistakes-happen-system-changes/

## What drives good outcomes and quality?

### Curry LA, Spatz E. Annals Int Med 2011

- Mortality from Acute Myocardial Infarction
- Compared hospitals with best survival and worse survival to try to differentiate reasons
- Lowest mortality/best survival hospitals
  - Organizational cultures that encouraged engagement in quality
  - Strong interdepartmental coordination
  - Strong communication
  - Learning organizations

**Quality**: Safe, Reliable, and Effective Healthcare that puts pets and their families first

"In order to be trusted, we must be safe" – Mayo Clinic



## **Questions?**

- bdavidow@vetidealist.com
- EM Folder on VIN
- Ihi.org
- <u>https://vetidealist.com/three-things-safer-for-pets/</u>
- https://www.vin.com/members/boards/discussionviewe r.aspx?documentid=8730461&viewfirst=1&findsince=262 80000