Button Battery Task Force Meeting  
Sunday, October 25, 2015  
2:00 – 4:00 pm  
Marriott Marquis, Mount Vernon Square  
Washington, DC

PRESENT  
Ian Jacobs, MD, BBTF Chair  
Barbara Valentino, Landsdown Laboratories  
Joan Shook, MD, Pediatric Emergency Medicine  
Toby Litovitz, MD – National Poison Control Center  
Terri Giordano, CHOP  
Doug Lee, U.S. CPSC  
Scott Schoem, MD  
Jeffrey Simmons, MD

PHONE LINE  
Keith Rhoades, Intertek  
Joe Procoeio, Panasonic  
Peter Koltai, MD  
Jamie Wilson, Safety Institute  
Kathy, AAO  
Allan Saadus, Sony Electronics  
Fred Stevens, Jade Green Enterprises  
Ted Barnes, ABC Kenwood  
Kris Jatana, MD, Subcommittee Chair  
Bobby Nijjar, Langner Labs, Boston  
David Brumbaugh, MD (GI), Colorado

AGENDA  
Dr. Ian Jacobs, Chair, opened the meeting at 2:00pm and welcomed the attendees and those on the conference call. The meeting minutes from April 2015 were approved.

Update on multi-center review study for management of complex cases (Dr. Simon)  
The retrospective survey is looking at complex cases and reviewing patient cases includes five centers approved by IRB.
Status: UPMC, Utah, LA, CHOP, Wash U, SUNY are confirmed. Data has been collected from 3 centers.

The goal is to review few hundred cases in up to 10 institutions. GI came out with a button battery protocol, which only looked at lower obstructions. We need to look at when general surgery should get involved. This task force needs to ensure that pediatric surgery has a voice. Peter Koltai - (NB: all 3 services need to be immediately called, with the ENT taking them out, follow-up by the others, cooperation is always a problem). Currently looking for more centers to become involved in this multi-institutional study.

**Update on Karp Battery Design-(Quantum Tunnel Coating)**
The Karp Battery Design with Quantum Tunnel Coating features a button battery that only is charged when compressed. The work continues at Landsdown Labs, which is the start-up company. Dr. Karp is now working on biocompatible coating with a focus on the 3-volt batteries, testing of the battery, and looking for investment. The battery is a nonconductor of energy when it is not compressed, but when compressed, the particles in the battery are close enough to charge and conduct energy.

Bobby Nijjar from Landsdown Labs is leading that process. Can the coating last for longer period of times in an aqueous environment? Is it fully protective? No conduction in water. Use a live pig or artificial saliva. Dr. Scott Milkovich volunteered to put the prototype battery through the Intertek system. Can you scrub through the battery coating? Doug Lee concern: will it be affected by a point pressure on the edges?

**Industry Voluntary UL-4200 A- official March 2015:**
The new guidelines state that lithium battery compartment security requires 2-part simultaneous opening or screwdriver. Industry Voluntary guidelines (from Underwriters Laboratory) will take time as newer ones replace older products.

**ACTION ITEM:** How can we get a list of product safety officers from electronic stores? Or Purchasing Agents so that we can follow-up with them regarding safer batteries?

**ACTION ITEM:** How can we contact Mommy bloggers about this issue?

Group of families whose children have been harmed. Blog: Safety Institute, National PTA organizations

**Physician and Consumer Education:**
- American College of Surgeons Panel (10/6/15) with Craig Derkay, Kris Jatana, Toby Litovitz and Pediatric surgeons (magnets)
- ACS (2014) with Peter Koltai as moderator
- Pediatric Otolaryngology Caribbean Update meeting
- ABEA meeting
ACTON ITEM: Find out who is the contact person for Text4Baby and can we get messages about button battery prevention included in the tweets? Holiday shopping.

Other avenues of consumer education include Healthy Children.org; mommy bloggers; primary care providers; LinkedIn Group Button Battery Task Force; SmartBriefs

ACTION ITEM: Work with Dr. Kris Jatana to create a patient education handout and add the Button Battery Task force logo.

ACTION ITEM: #buttonbattery. Toy Safety issues, create 8-10 tweets for physicians and consumers, to go out before holiday shopping. Send to Cassandra at AAP. Put her in touch with ABEA and AAO-HNS

ACTION ITEM: Add Cassandra to the Task Force

NEW BUSINESS

Update on recent data (Dr. Toby Litovitz)
National Poison Awareness Month is in March. Two fatalities from Button Battery ingestion in 2014; with 173 major effects to include esophageal perforation, TE or AW fistula, vocal cord paralysis. Severity has plateaued. Past five years have been pretty stable. All button batteries are dangerous if ingested or placed inside the body.

Metal Detector investigation and Development of Prototype (Dr. Kris Jatana)
In an attempt to avoid radiation and still screen children, product development continues to look at new products, de-risking, issues with using hand held metal detectors in a pediatrician office. This is actively being researched by Dr. Kris Jatana. Can this be used in emergency departments as a screening tool? Dr. Shook mentioned that Emergency Rooms will never implement this type of instrument, since it has been used in the past. Point of care ultrasound is exploding in emergency medicine. Develop criteria for ultrasound screening. Is there any information about ultrasounds and foreign body ingestion? Emergency rooms already have them, how can they be incorporated?

ACTION ITEM: Dr. Jatana will consider adding can add an ultrasound to his study which is already approved. Other hospitals should email Dr. Jatana if there is interest in participating in metal detector study.

Fundamental Button Battery Injury Mechanism and Novel Mitigation Strategies (Dr. Kris Jatana, Dr. Ian Jacobs, Dr. Scott Milkovich, Dr. Keith Rhoades).

The study clearly demonstrated hydrolysis and high pH at negative pole. Pending toxin assay. Recreated with copper conducting wire. Mitigation strategies examined including
sterile water and acidic solution irrigations. Potential treatment of weakly acidic
irrigation, diluting and irrigating, using lemon juice and other common household
beverages, has shown some promise. Pending further testing and submission to ABEA
meeting.

**Next Button Battery Task Force meeting**  
*COSM, May 2016, in Chicago*

Dr. Kris Jatana will be helping lead a future UL task group regarding 1 ½ volt, non-lithium
chemistry button batteries, given severe injury risks exist with these as well. Many
children have been seriously injured from these smaller batteries.

US manufacturers are on board with the standards, trying to find a solution for creating
and enforcing standard with international manufacturers, such as including the sticky
clear paper on the battery that needs to be taken off before use. The industry has
created a pictogram that denotes danger to be used on packaging for laundry pods and
button batteries. Trying to enforce child resistant packaging. Manufacturers would like
to see a more formal standard, regulation so everyone is on a level playing field.

**Subcommittee Structure** within ABEA/AAP

**ACTION ITEM:** Dr. Jacobs to update the Subcommittee list proposals to discuss at
May 2016 Meeting.

**Legislative Subcommittee**  
Gresham Richter (Subcommittee Chair)  
Ian Jacobs  
Mark DelMonte – AAP legislative  
Joy Trimmer- AAO Legislative  
Kris Jatana  
Kathy Lewis-AAO  
Megan Marcinko- AAO

**Outreach/Education Subcommittee**  
Ian Jacobs  
Scott Schoem  
Jim Harisdades  
Ellen Friedman  
Vivian Thorne- AAP  
Bonnie Kozial - AAP  
Debra Billmire  
Karen Maule  
Peter Koltai  
Steve Krug
Elizabeth Powell

**Industry Collaboration and Product Redesign Subcommittee**
Kris Jatana (Subcommittee Chair)
Ian Jacobs
Jim Reilly
Scott Schoem
Ellen Friedman
Members of industry
CPSC representative

**Development Subcommittee**
Reza Rahbar (Subcommittee Chair)
Mike Benninger
Ian Jacobs
Peter Koltai
David Ebling
Don Mays