#### Presenter

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## **Topic**

A case of pancreatic injury: accident or abuse

## Why this case is of interest

- Serious household injuries may occasionally be severe and challenge our assumptions about how injuries occur in children.
- Children with developmental delay represent a particular challenge because we rely on
  historical elements including a child's statements to assist in making a diagnosis. We
  must keep in mind that children with disabilities and chronic handicapping conditions are
  more vulnerable to abuse than their typically developing peers.

## **Case summary**

A 6-year-old boy with autism was transferred to the Children's Hospital with a diagnosis of pancreatitis. Review of the CT scan from the referring hospital revealed a complete pancreatic transection, which was confirmed intra-operatively. There was no history of trauma offered to explain the injury. The child was taken to the OR for a spleen-sparing subtotal pancreatectomy. There was abundant inflammatory reaction but no active hemorrhage. No injury to the bowel or liver was noted in the OR.

On careful review of the history, the mother explained that 2-3 days prior to admission the boy was playing in another room and she heard a noise. She believes that he may have fallen on a walker or stroller. No injury event was observed.

#### Past medical history

History of frequent vomiting; has had GI evaluation and diagnosed with GERD. No prior hospitalizations.

## Social history

Lives with mother, father and two 3-year-old siblings.

Father works when he can but is often unable because he needs to care for his wife who has a seizure disorder and his children.

#### Family history

Twin siblings have developmental delay and CP. Mother has seizures.

#### **Physical examination**

Abdominal exam limited by bandages Nonspecific marks on lower extremities Scar on scalp and abrasion on chin

## **Key learning points**

- 1. Pancreatic injury in children can be due to abuse.
- 2. Accidental injuries of the pancreas in children are primarily from MVCs and handlebars.
- 3. Handlebar injuries have severity beyond what you might expect.
- 4. The multidisciplinary team is essential for these evaluations.

# **Summary of literature**

Sutherland I, Ledder O, Crameri J, Nydegger A, Catto-Smith A, Cain T, Oliver M. Pancreatic trauma in children. *Pediatr Surg Int.* 2010;26:1201–1206.

Arkovitz, MS, Johnson N, Garcia VF. Pancreatic trauma in children: Mechanisms of injury. *The Journal of Trauma: Injury, Infection, and Critical Care*. 1997;42(1):49-53.

Takishima T, Sugimoto K, Asari Y, Kikuno T, Hirata M, Kakita A, Ohwada T, Maekawa K. Characteristics of pancreatic injury in children: A comparison with such injury in adults. *Journal of Pediatric Surgery*. 1996;31(7):896-900.