The following recommendations have been compiled from the reports of the expert review committees of the Office of the Chief Coroner and patient safety organizations.

**Assuring anal patency in newborns**

The Office of the Chief Coroner Pediatric Death Review Committee (PDRC) recently reviewed the case of a four-day-old infant who died from feculent peritonitis resulting from sigmoid perforation due to an imperforate anus. The circumstances of the death highlight the importance of ensuring newborn anal patency, both visually and by use of rectal thermometer.

Continued on page 30...
The 3125 g male infant was delivered by spontaneous vaginal delivery. The Infant Labour and Birth Summary did not document any observed abnormalities. A nursing assessment documentation form was completed approximately one hour after birth and neither check box indicating abnormal or normal genitalia had been marked. The newborn flow sheet documented normal temperature without indication of the method of temperature measurement (i.e., axillary or rectal).

Approximately nine hours after birth, the physician documented a normal newborn examination.

At 17, 24 and 30 hours after birth, passage of stool and urine was documented on the medical record.

There was conflicting information on the record as to whether the mother had observed any urine or stool when changing the infant’s diaper. A language barrier between the mother and medical staff may have contributed to this confusion.

The infant was discharged home on day two with a discharge plan of follow-up at the post partum clinic at four days of age. The Healthy Babies/Healthy Children screen scored zero.

The mother and child did not attend the clinic appointment. The family reportedly contacted the clinic hoping to be seen later that afternoon, however, they were given an appointment for the following morning. The family attempted to contact their family physician who was unavailable. After the death, the family reported that they had tried to arrange assessment because of their concern that the baby had not passed stool.

Later that day, the baby appeared very unwell so the parents drove to the hospital and upon assessment, the infant was found to be cold, pale, apneic, pulseless and stiff with a greatly distended abdomen and dark fluid coming from the nostrils. The physician noted that rigor mortis had developed and 10 minutes of resuscitative attempts were unsuccessful. The physician requested that a rectal temperature be taken at which time an imperforate anus was identified.

The issues identified in this case include:

• An imperforate anus was not identified despite the completion of a number of examinations of the anogenital area.

• The Initial Nursing Assessment did not include completion of the check box for anal patency.

• The newborn flow sheet did not indicate the method of temperature measurement.

• A fistula, often observed concurrently with an imperforate anus, was not present.

• Documentation was present in the medical record about stool passage on three occasions prior to discharge.

• Communication (i.e., language) difficulties may have contributed to the documented report that the mother observed stool in the diaper.

• The medical record included documentation that education was provided to the mother prior to discharge. This was noted to have included discussion of normal stooling expectations with notation that no further education was needed.

This case demonstrates the importance of assuring anal patency in newborns at the initial examination and any subsequent examinations.

The PDRC made an additional recommendation for The Canadian Pediatric Society to consider development of a standardized neonatal assessment approach that would assist to reduce the potential to miss an imperforate anus.

**Perils of Bed Rails**

The Geriatric and Long-Term Care Review Committee recently made some recommendations about the use of restraints after a resident in a retirement home died after becoming entrapped in her bed rail.

The patient was an 83-year-old woman. She had suffered a previous stroke leading to a hemiparesis.
She also had significant leg contractures from multiple hip operations leading to immobility. There was a well recognized history of multiple falls. She also had ongoing challenges with recurrent skin breakdown and infections which at times led to an acute confusional state. Fall prevention strategies included a short bed rail as well as night checks.

On the night of her death, the patient was not seen for two hours prior to being found trapped in the bed rail. It is unclear what other alternative prevention strategies were in place, including the use of a bed alarm or low bed. It is not clear whether this equipment would have been available in a retirement home setting. Although the care plan indicated “night check” it is not clear how often the resident was to be checked on a scheduled basis while in bed. It is also not clear from the care plan if the bed rail was used as a personal assistance services device or a restraint. Alternatives to the bed rail, if used as a restraint, were not documented in the resident’s care plan. Bed rails place residents at risk of bed entrapment. Factors contributing to entrapment include mattress compressibility, lateral shift of the mattress or rail and the degree of play from loosened rails.

The patient was also receiving numerous medications at bed time that may have contributed further to night time confusion.

Health-care professionals are reminded that a bed rail is a form of restraint and is not without risk. Fall prevention strategies need to be discussed and well documented. Supervision of residents in restraints needs to be consistent with the resident’s care needs no matter what the setting.

The Committee made the following recommendations to health-care professionals:

- Document alternative strategies considered and attempted prior to the usage of restraints.
- Use restraints to prevent injuries only after all other fall prevention strategies have been utilized and deemed to be ineffective.

High index of suspicion of fracture in elderly needed

Health-care professionals are reminded that a hip fracture may be present even in the absence of leg shortening and rotation of the hip. A person may be able to weight bear even in the presence of a fracture.

Health-care professionals should have a high index of suspicion for fracture in frail, elderly persons even in the absence of physical findings of definitive fracture.

This reminder is prompted by a report from the Geriatric and Long-Term Review Committee after a 99-year-old woman sustained a fall leading to a right hip fracture. She later died of congestive heart failure, myocardial infarction as a consequence of the hip fracture.

On initial assessment after the fall, the nurse at the long-term care facility did not feel there was sufficient evidence to support the presence of a hip fracture. The Review Committee noted that the injured leg will only be shortened and externally rotated if the fracture is displaced. It is clear from the initial x-rays in this case that the right hip fracture had only slight impaction and there was no major disruption of the joint.

The Office of the Chief Coroner would like to thank Ms. Kathy Kerr, Executive Lead, Committees from the Office of the Chief Coroner, for her role in the preparation of summaries.