### **FACT SHEET**





# Physical Changes After Brain Injury Hormonal Imbalances

#### **QUICK FACTS**

- May occur when parts of the brain responsible for controlling hormones is damaged
- May begin soon after a brain injury or years later
- Hormonal imbalances from damage to the brain may go undiagnosed due to:
  - oA large number of hormones that are affected
  - o Symptoms may be similar to some common effects of brain injury

#### WHAT MIGHT IT LOOK LIKE?

## Symptoms of hormonal imbalance which are similar to other common effects of brain injury include:

- Depression, anxiety, mood swings
- Vision changes
- Fatique
- Headaches
- Sexual changes (i.e. impotence and/or change in sex drive)

#### Other possible symptoms include:

- Weakness in muscles, sensitivity to cold
- Loss of body hair
- Changes to menstruation and/or reduced fertility
- Dry skin, pale appearance
- Low blood pressure, dizziness
- Increased thirst and urination (diabetes insipidus)
- Vomiting, confusion, convulsions (hyponatremia)

#### WHAT ARE THE POSSIBLE CAUSES AND COMPLICATIONS?

#### Possible causes:

• Damage to the pituitary gland and/or hypothalamus

#### Possible complications:

- Hormonal systems most changed by brain injury are sex hormones, growth hormones or stress hormones
- Children may experience growth problems if the injury results in changes to their levels of growth hormone leading to the many symptoms mentioned above

#### WHAT CAN WE DO?

 Encourage your doctor to test hormone levels and scan for possible damage to hypothalamus or pituitary gland

#### Ask your doctor questions regarding possible hormone imbalance

- Have hormones been affected by the injury?
- Can these hormones be replaced?
- Can symptoms be relieved?
- What are the risks and benefits of the treatment?
- How will I know if hormone function returns to normal?
- How often should hormone levels be checked?