

## CUSHING'S DISEASE FACT SHEET

Cushing's syndrome is an endocrine disorder caused by excessive cortisol, a vital hormone that regulates metabolism, maintains cardiovascular function and helps the body respond to stress. Cushing's disease is a form of Cushing's syndrome, in which excess cortisol production is triggered by an adrenocorticotrophic hormone (ACTH)-secreting pituitary adenoma. To date, no known causes or risk factors have been identified for development of the benign (non-cancerous) tumors in the pituitary gland that cause Cushing's disease.

Cushing's disease is a rare but serious disease that affects approximately one to two patients per million per year. It most commonly affects adults from 20 to 50 years old and affects women three times more often than men.

### Prognosis

There are many serious health complications associated with Cushing's disease, including: osteoporosis and subsequently fractures, diabetes, high blood pressure, lipid disorders, infections, kidney stones and blood clotting disorders. Cushing's disease may also reduce thyroid function (hypothyroidism) and may cause infertility. If left untreated, Cushing's disease can cause severe illness or death and is associated with significant morbidity and increased mortality up to four times higher than the healthy population.

### Disease Management Guidelines

The first line and most common treatment approach for Cushing's disease is surgical removal of the tumor. The reported initial success rate for pituitary surgery for Cushing's disease varies between 60% and 86%, however up to 25% of patients suffer from recurrence after apparent remission.

If surgery is not appropriate or effective, other disease management options include: medical therapy, radiation to the pituitary gland, stereotactic radiosurgery or gamma knife radiation, and in extreme cases full removal of the adrenal glands. It may take several months or years before patients experience improvement in their symptoms from radiation treatment alone.

### Clinical Manifestations

The clinical manifestations of Cushing's disease are broad and diverse but can be grouped into three main categories that include, but are not limited to:

#### Physical

- Weight gain
- Central obesity (abdomen that sticks out with thin arms and legs)
- Moon face (round, red and full)
- Purple striae (stretch marks) on the abdomen, thighs and breasts
- Buffalo hump (collection of fat on the back of the neck)
- Acne or skin infections
- Easy bruising
- Hirsutism (excessive and unusual hair growth in females)
- Muscle weakness

#### Hormonal

- Depression, anxiety and irritability
- Headache
- Impotence
- Osteoporosis
- Interrupted menstrual cycle

#### Metabolic/Cardiovascular

- Severe fatigue and weakness
- Metabolic disturbance
- Hypertension
- Increased thirst and urination

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