**Hormonal Precursor Could Make Dx of Sepsis Easier**

BY JONATHAN GARDNER
Contributing Writer

**Glasgow, Scotland** — Swiss researchers have identified a hormonal precursor that may make it easier for physicians to identify patients suffering from sepsis, according to a study presented at the 8th European Congress of Endocrinology.

The substance is copeptin, a precursor to vasopressin, which is produced when the body undergoes stress, such as septic shock. Vasopressin is unstable and has a short half-life, making it difficult to use in identifying patients who are suffering from sepsis. Copeptin, on the other hand, is more stable and is derived from the same precursor molecule.

A team of researchers from the departments of endocrinology and internal medicine at University Hospital, Basel, Switzerland, led by Dr. Mirjam Christ-Crain, evaluated 101 consecutively critically ill patients over a 9-month period and compared their relative serum copeptin levels with relative copeptin levels in 50 healthy control subjects. Copeptin levels were measured at admission, day 2, and hospital discharge or death.

Copeptin levels were identified in the blood of patients suffering from sepsis within 42 days later. Copeptin levels were significantly higher in patients with sepsis compared with baseline levels and with those not suffering from sepsis. Copeptin levels were also significantly higher when patients had severe sepsis or septic shock compared with patients with sepsis alone.

Sepsis is the 10th-leading cause of death in the United States, claiming 33,464 lives in 2004, according to the Centers for Disease Control and Prevention.

“Copeptin is a novel tool to assess the prognosis of sepsis,” Dr. Christ-Crain observed. “It might help to guide the resource allocation of hospital care to those patients especially in need for intensive surveillance.”

**Multiple Vaccinations Pose Minimal Risk to Children**

**Chicago, Illinois** — A new study suggests that stress hyperglycemia may be an important predictor of morbidity and mortality in nondiabetic patients with sepsis.

The investigation included 242 patients who were hospitalized who were sepsis-free in three hospitals in southwestern Greece during a 1-year period.

Hyperglycemia was defined as an admission or in-hospital fasting glucose level of 126 mg/dL or more, or a random blood glucose level of 200 mg/dL or more, on two or more evaluations.

Hyperglycemia—defined as a transient elevation of blood glucose levels due to various factors including stress, injury, and surgery—was present in 20% of the participating patients.

Stress hyperglycemia—defined as a transient elevation of blood glucose levels due to various factors including stress, injury, and surgery—was present in 20% of the participating patients. Patients with stress hyperglycemia died, compared with those participants who had normal glucose levels (43.4% vs. 13.2%), the investigator reported.

Stress hyperglycemia was not related to a genetic predisposition to diabetes mellitus. Only 6% of hyperglycemic patients had a first-degree relative with diabetes.

**Stress Hyperglycemia Predictive in Sepsis**

BY PATRICE WENDLING
Chicago Bureau

**Nice, France** — A new study suggests that stress hyperglycemia may be an important predictor of morbidity and mortality in nondiabetic patients with sepsis.

Stress hyperglycemia was present in 20% of the participating patients. Patients with stress hyperglycemia died, compared with those participants who had normal glucose levels (43.4% vs. 13.2%), the investigator reported.

Stress hyperglycemia was not related to a genetic predisposition to diabetes mellitus. Only 6% of hyperglycemic patients had a first-degree relative with diabetes.

**Suspect Chronic Zoster In All Compromised Kids**

**San Francisco** — Suspect varicella zoster in all immunocompromised children who have symptoms that look like chickenpox, according to the American Academy of Dermatology.

Dr. Dr. Charles Goodman, San Francisco, stated at the annual meeting of the American Academy of Dermatology that zoster lesions in immunocompromised children are more likely to cause drug resistance, because the zoster virus typically imitates antibiotic-resistant bacteria.

Dr. Goodman said he had an eruption of multiple vesicles on his head and neck. Culture identified them as varicella zoster infection, and he was treated with high-dose IV acyclovir 10 mg/kg for 15 days.

The patient went home and was doing well until a month later when he was readmitted with another unusual cutaneous eruption on his whole body. The vesicles and papules housed varicella zoster, culture showed.

Another round of high-dose acyclovir stemmed the eruption of any new lesions, but the chronic lesions did not resolve.

Around this time the patient’s condition deteriorated to the point that support was withdrawn, and he died.