Langerhans cell histiocytosis (LCH) is the most common of the histiocytic disorders and occurs when the body accumulates too many immature Langerhans cells, a subset of the larger family of cells known as histiocytes.

Histiocytes are cells within the immune system that function as “phagocytes,” which means they ingest and remove foreign bodies like bacteria and debris. Langerhans cells are a type of white blood cell (immune cells) that normally help the body fight infections.

In LCH, too many abnormal Langerhans cells are produced, together with other types of inflammatory cells, and these cells build up in certain parts of the body where they can form tumors or damage organs.

In a recent study, it was reported that 31% of patients had disease in a single system, 68% had more than one system involved, and 30% had pituitary involvement with diabetes insipidus. According to a patient registry in Germany, it is estimated that 46% of adult patients had bone lesions, 17% skin, 7% pituitary, 4% liver/spleen, 2% brain, and 2% GI tract.

It is estimated that 63% of adults with LCH have lung-only disease, pulmonary Langerhans cell histiocytosis (PLCH). It is believed that 90-95% of adults with PLCH are past or current smokers, suggesting that smoking is related.

LCH is usually diagnosed with a tissue biopsy, (when a sample of tumor material is taken with a medical or surgical procedure), in addition to other testing, such as x-rays and blood studies.

A biopsy of a suspected LCH tumor is necessary to make a definitive diagnosis.

Learn more about LCH and help us spread awareness!

www.histio.org