Ulcer

Ulcers are local defects on the surface of an organ produced by necrosis and sloughing of the tissue. Common causes are trauma and infection and an inadequate intrinsic blood supply. Ulcers occur most commonly in the mucosa of the mouth, skin and gastrointestinal tract.

In the acute state there is an intensive neutrophilic response and vascular dilatation at the margins of the defect. Shortly, necrosis becomes apparent and often there is crusting. Later, the margins of the ulcer start to show fibrosis and a population of chronic inflammatory cells appears—lymphocytes, macrophages and plasma cells. Healing occurs as the epithelium reestablishes itself across the ulcer bed leaving a certain amount of scar tissue beneath the surface.

Ulcer, nose. There is intact squamous epithelium (single arrow) and then the edge of an ulcer where the epithelium is lost and replaced by an inflamed scale crust (double arrows).
Ulcer, nose, granulation tissue with acute and chronic inflammation in the base of the ulcer (triangle). Area of squamous epithelium seen (arrow).

Ulcer, nasal septum. There is acute and chronic inflammation, granulation tissue (triangle) and epithelial acanthosis (arrow) adjacent to the ulcer. This is the edge of an ulcer that had exposed the septal cartilage so that septal perforation was imminent.