

Duct Ectasia — Periductal Mastitis

Mammary Duct Ectasia (Plasma Cell Mastitis or Periductal Mastitis)

The breast has between 15 to 20 ducts that radiate from the nipple. The ducts carry the milk to the nipple. Normal breast ducts are lined with 1 to 2 layers of cells. Mammary duct ectasia is a condition within the duct that occurs and causes inflammation of the cells that line the ducts. Mammary duct ectasia occurs most often immediately before or after menopause. It may occur in one, several or all of the ducts in one or both breasts.

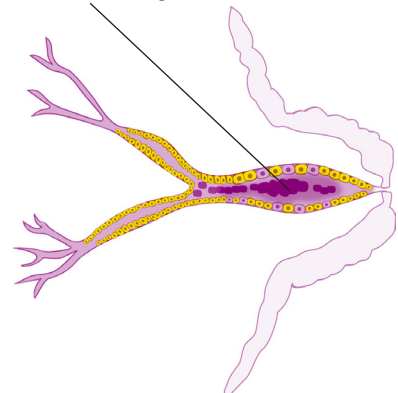
Duct Ectasia Development

Ducts located beneath the nipple become filled and dilated with the cells that line the ducts. This occurs because of stagnation and not because of a blockage. This accumulated debris appears as a thick, white to greenish gray to blackish discharge from one, several or all of the nipple openings. The discharge can cause the nipple to itch and become irritated.

The internal accumulation of debris in the duct can also cause a break in the cell walls (called mucosal ulceration) that can cause a bloody discharge. This ulceration causes the tissues around the ducts to swell from a chemical inflammatory reaction to the leaking fluid from inside the ducts. During this inflammatory progression of the condition, pain varies from mild to severe.

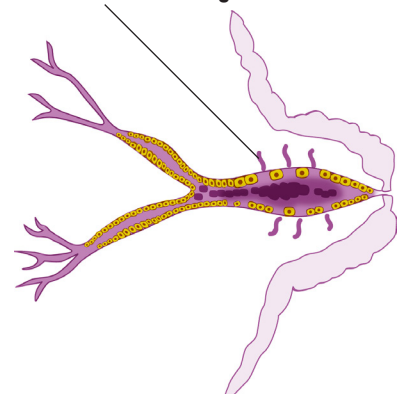
Duct Ectasia

Old cells collect in the duct and stagnate



Internal Accumulation

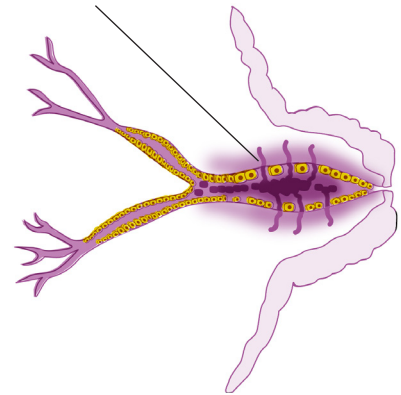
Fluid seeps through into surrounding tissues causing irritation



The inflammation causes the tissues around the ducts to become fibrosed (thickened and hardened). During this time pain may be intense. The inflammation can develop into an infection (mastitis) and may even develop into an abscess (a localized collection of pus). Antibiotics will usually resolve the infection, but, occasionally, surgery is required to remove the abscessed duct(s).

Inflammation

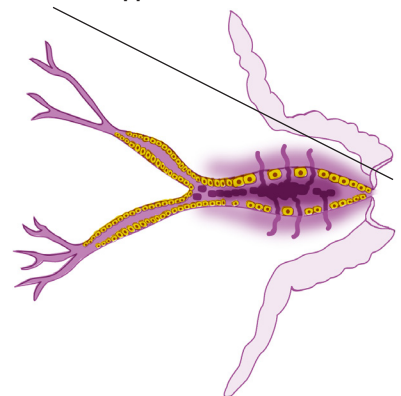
Tissues around the duct become inflamed, painful and will eventually harden



Late-stage progression of the disease will often cause nipple inversion. Mammary duct ectasia is not a cancerous condition. Smoking greatly increases the percentage of duct ectasia conditions that develop into chronic infections and abscesses. Duct ectasia can become a chronic problem with periods of remission and then exacerbation.

Nipple Inversion

Late-stage disease often causes nipple inversion



Additional Information: