## **Mandibulofacial Dysostosis – MDC or MDF**

## What is it?

The anatomic features overlap with a variety of other facial defects and can include cleft palate, brachygnathia (short jaw) and camplygnathia (crooked jaw or face). These are variably present in affected calves and are sometimes dramatic.

## What does it look like?

The unique and consistent hallmarks of the condition include unusual bilateral skin tags just behind the corner of the mouth. These tags are attached to an unusual bone formation. There may be additional skin tags near and/or below the ears. A ridge of Meckel's cartilage, a structure usually present only during embryonic development, is retained in these calves and attaches to the skin tag. This cartilage is encased in bone as it is followed from the skin tag toward the base of the ear. This bone attaches specifically to the zygomatic process of the temporal bone (just above the articulation of the jaw). The calves' ears are sometimes slightly small and floppy. Muscles of the jaw are underdeveloped, and calves may have an elongate oral opening appearing as an exaggerated smile. The nursing reflex is present, but nursing is not vigorous. Calves with the additional cleft palate, severely shortened or crooked jaws are debilitated in ability to nurse. Calves with the defect are live born but are not able to thrive.