

RESPIRATORY SYSTEM

Nasal Cavity and Paranasal Sinuses

A good radiography is taken under sedation or general anesthesia

Nasal Cavity and Paranasal Sinuses;

* L/L

** Closed mouth V/D

*** Open mouth V/D

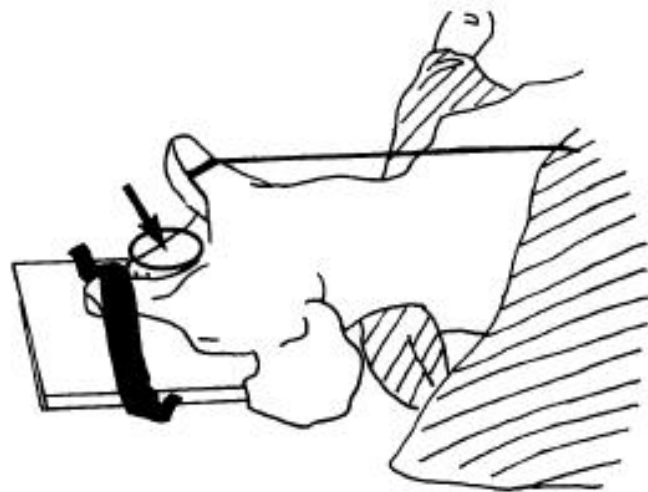
Maxilla, nasal and frontal bone lesions are determined on oblique radiographs

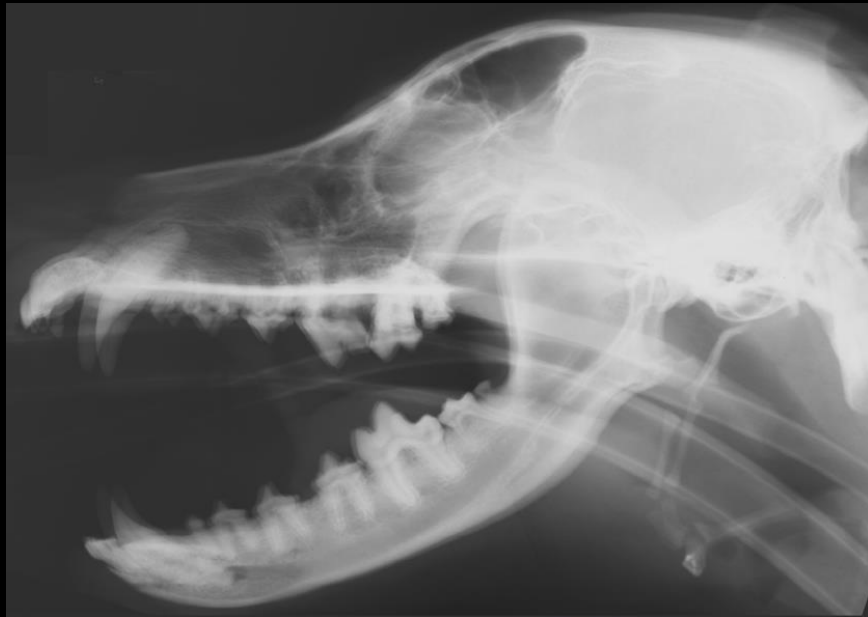
Radiographs obtained in this way provide nonspecific information.

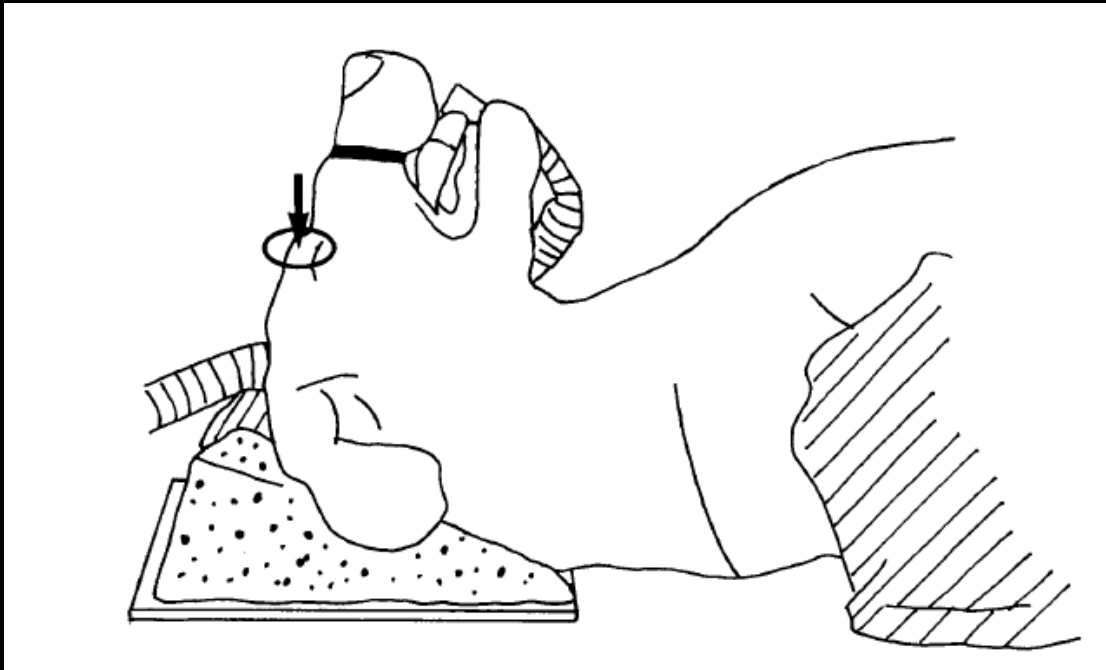
Definitive diagnosis: nasal discharge, cytological tests, biopsy



Figure 255 Ventrodorsal oblique (open mouth) projection of nasal chambers. Samoyed dog 6 years old, entire female.







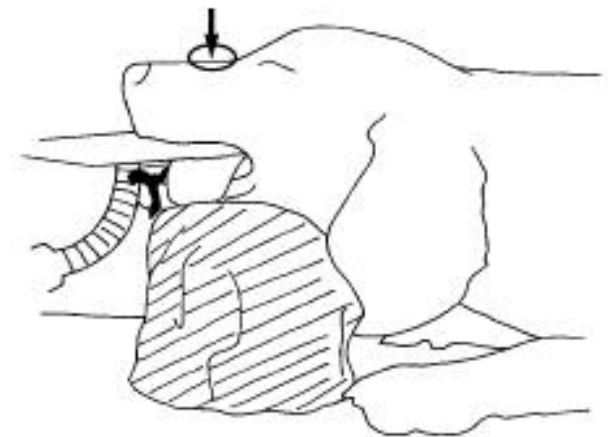


Figure 252 Line drawing of photograph representing radiographic positioning for Figure 251.

Shape Changes

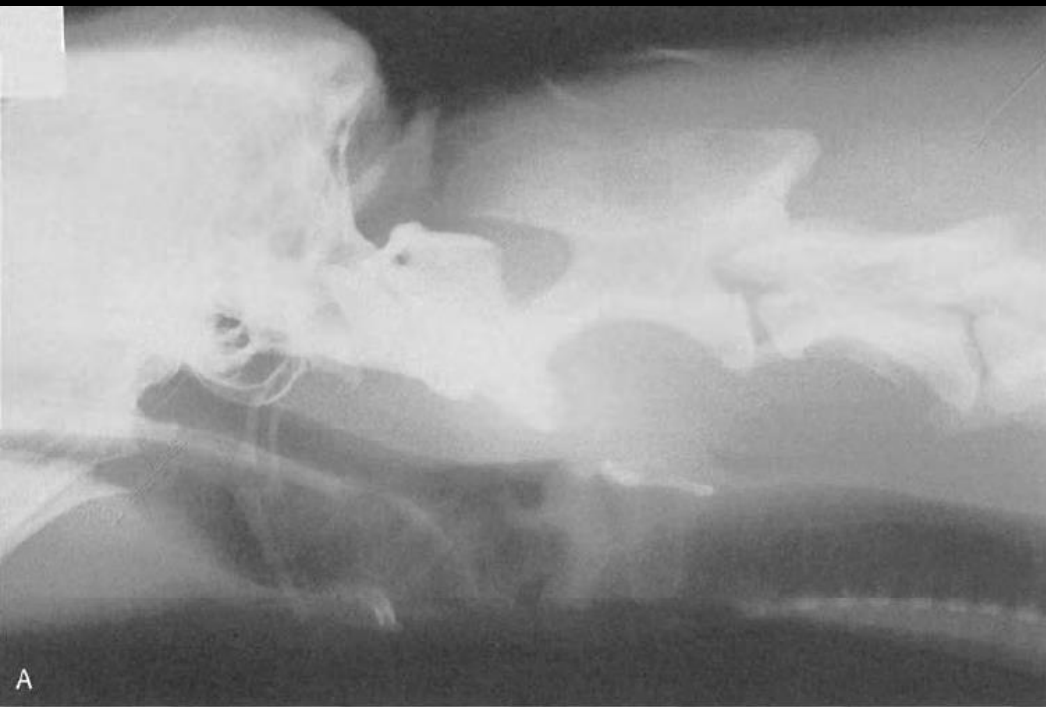
- Fractures involving one or more bone shaped after trauma
- Facial deformity in the nasal cavity due to neoplastic formation
- Cortical lysis and irregular periosteal bone formation as a result of tumors

What causes the change in radiographic opacity?

- Neoplasms
- Radiographic foreign bodies
- Chronic rhinitis; usually there is an increase in bilateral opacity
- Destructive rhinitis due to fungal infections – radiolucent appearance
- In a hyperplastic rhinitis caused by cryptococcus neoformans in cats, radiolucent and radiopaque regions are seen as mixed pathologies

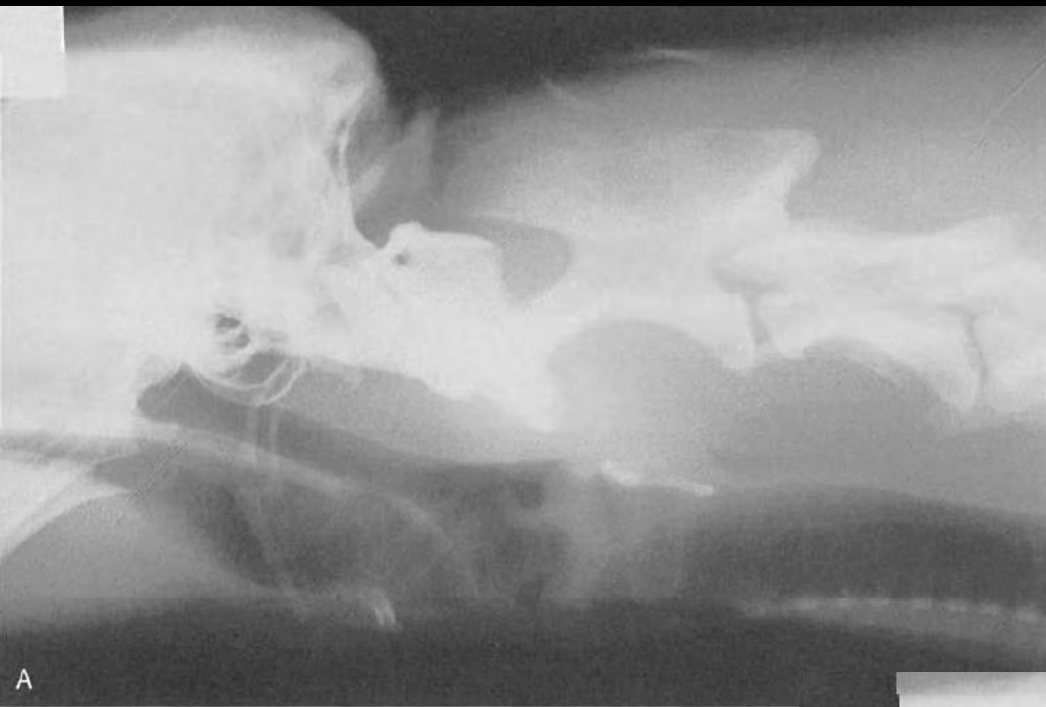
Radiographic finding of Larynx and Pharynx

- Anormal size and shape
 - Local and generalized swellings
- Lesions within the respiratory tract
 - Mass lesions with different capacity, such as abscesses, polyps, tumors and granulation tissue

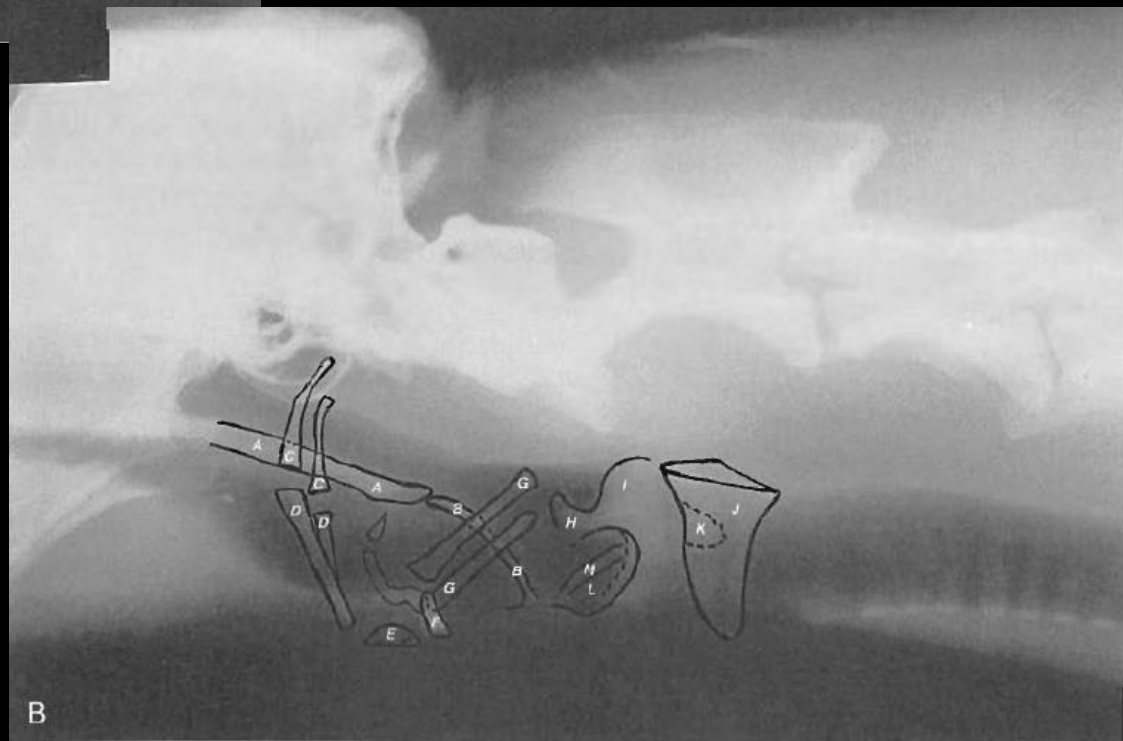


A





A



B

Lesions outside the respiratory tract

The lesions outside of the respiratory tract, causes narrowing areas in the respiratory tract because of pressure

The lesions forms due to swelling and hyperplasia of the lymph nodes or tumors of the thyroid gland



Trachea

Trachea is best seen in L/L radiography position

- With V/D radiography, displacement of trachea and main bronchi can be determined

- Tracheal collapse (this should be determined on the radiographs taken during the inspiration and expiration phase)
- If a collapse appears in the inspiration phase; it appears as a secondary manifestation of the tracheal or laryngeal disease or laryngeal paralysis



Image 1.0



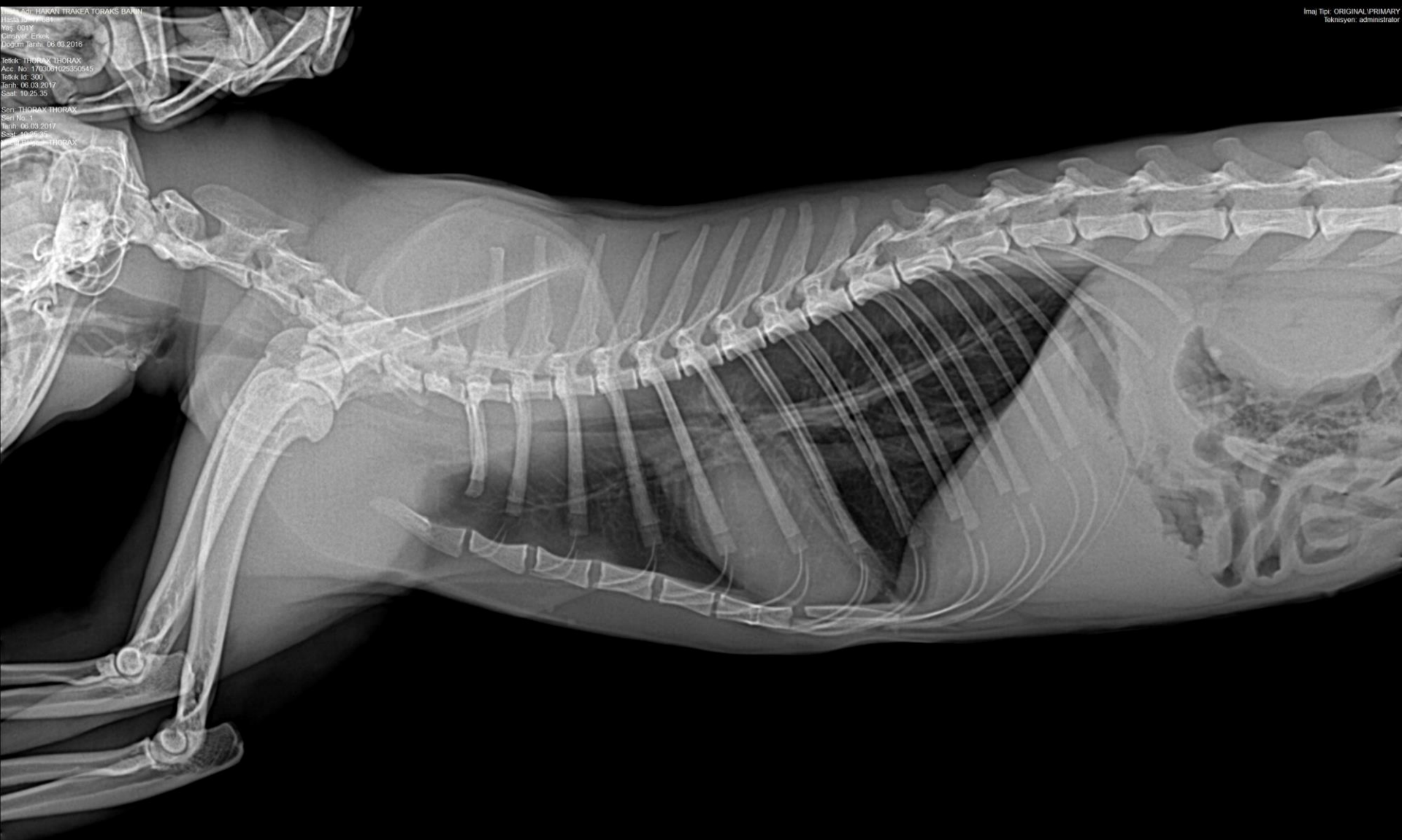
Image 2.0

001 - HAKAN TRAKEA TORAKS BAHU
Haka 001
Mag 0017
Cineyaf Erkek
Dogum Tarihi 06 03 2016

Tezlik THORAX THORAX
Acc. No 17630102350045
Tezlik 300
Tarih 06 03 2017
Saat 10:25:35

Seri THORAX THORAX
Seri No 1
Tarih 06 03 2017
Saat 10:25:35
Seri THORAX THORAX

Imaj Tipi: ORIGINAL/PRIMARY
Teknisyen: administrator



Why we take radiography of the lungs?

- Coughing
- Difficulty in breathing (Dyspnea)
- Very fast breathing (Tachypnea)
- Tacking of the old age profile
- Determination of primary or secondary tumors (Metastaz control)
- Trauma
- Exercise intolerance
- Weight loss
- Collapse
- Determination of abnormalities in chest wall

Criteria to be followed while taking thoracic x-rays:

1. Display quality
2. Correct position selection
3. Control of the breathing phase
4. Artifacts
5. Changes depending on animals' breed and age

Technical Factors

1. For a good radiography you need to do a good dosing

For this kV is increased and mA is decreased. The exposure time should be as short as possible.

* In case of high kV, the density of the film decreases and the film comes out darker.

** In case of low kV, the density of the film increases and the film comes out lighter

2. Motion should be reduced as much as possible

* It is necessary to reduce the use of mAs. Thus, movement can be eliminated.

3. Required collimation should be provided. X-ray beam for thorax radiographs should station caudal of the scapula.

4. The front legs must be pulled forward to prevent m. trisepts brachi masking the cranial mediastinum

Points to consider when taking lung radiography

- **Determination of Respiratory Phase**

1. To achieve maximum pulmonary contrast and detail the x-rays should be taken at the peak of inspiration
2. The contrast between bronchial and vasculature structure and the pulmonary parenchyma is reduced when the graph is taken in expiration. This leads to the wrong evaluation of the radiograph.