

# EXOTIC

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A PRACTICAL RESOURCE FOR CLINICIANS

Care of Spiny-tailed Lizards

Application of Lab Animal  
Immunoassays



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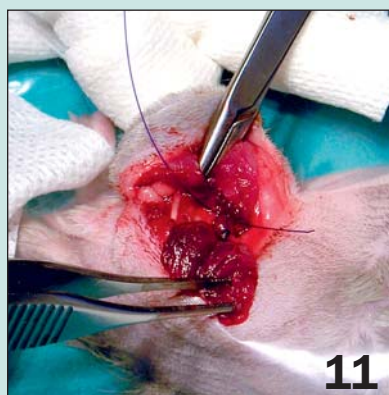
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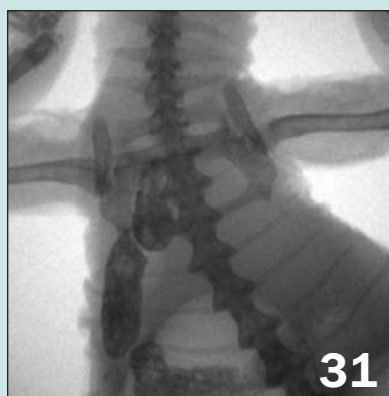
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# Radiographic Anatomy of the Guinea Pig Skull\*

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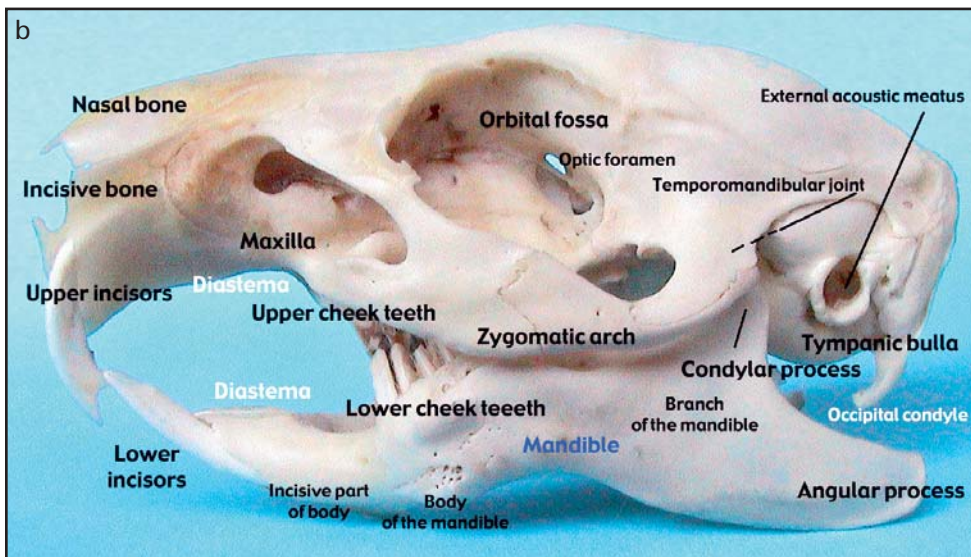
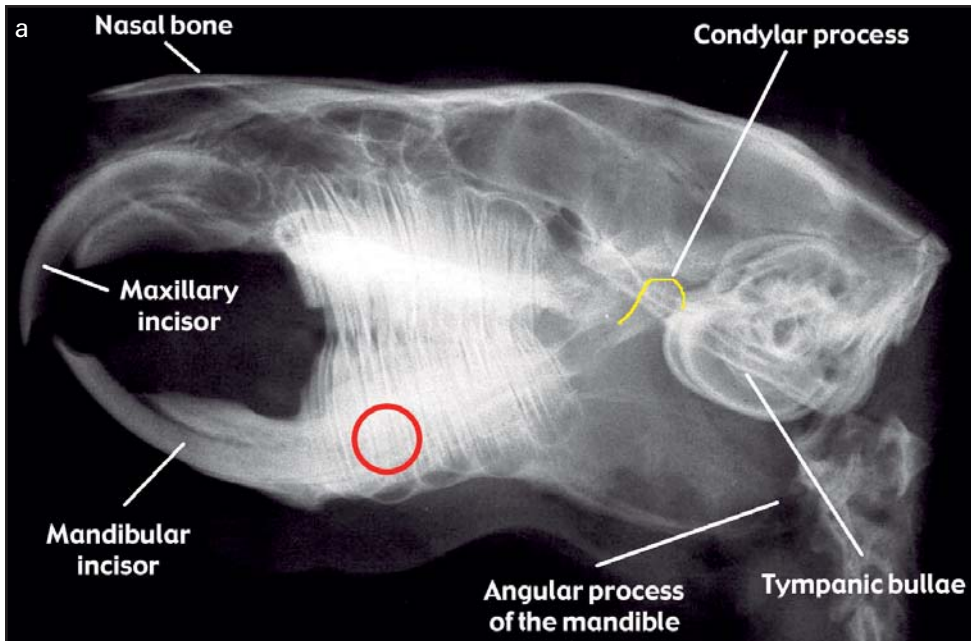
Teresa Bradley, DVM

Radiographic examination of the skull and teeth is an essential diagnostic tool in cases of suspected dental disease in lagomorphs and rodents. Multiple views are necessary for a full evaluation; the diagnosis should not be based on any single radiographic image. The radiographic series should always include a lateral skull view, two lateral oblique skull views, and a ventrodorsal or dorsoventral skull view. A rostral skull view and one or more intraoral dental views may also be useful. Deep sedation or general anesthesia is usually necessary for perfect positioning. For some anesthetic procedures, larger rabbits and rodents are intubated. However, for the purposes of skull radiography, an endotracheal tube may interfere with the image.

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\*Adapted from Capello VC, Gracis M: *Rabbit & Rodent Dentistry Handbook*, Zoological Education Network, pp 65, 76-79; 2005.

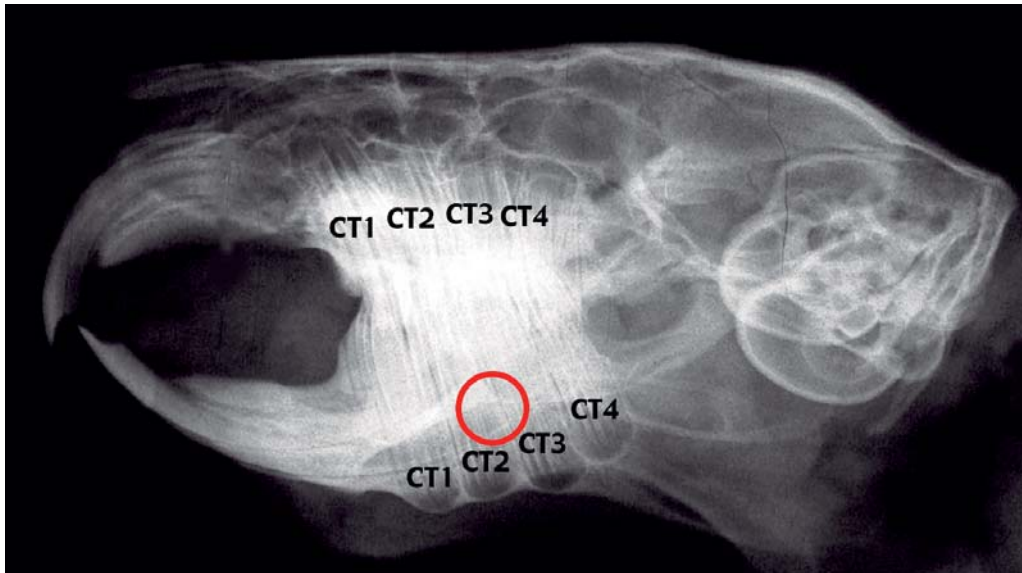
## Skull Radiograph: Lateral View



**Figs 1a,b.** Both the occlusal plane of the cheek teeth and the apex of the mandibular incisors are difficult to evaluate in guinea pigs in this view. The apex of the mandibular incisors extends, and is lingual to, the second cheek tooth, which obscures it on a true lateral projection (a, red circle). The apex of the maxillary incisor teeth is visible just mesial to the root of the first cheek teeth. The mandibular cheek teeth apices are very close to the ventral cortex of the mandible.

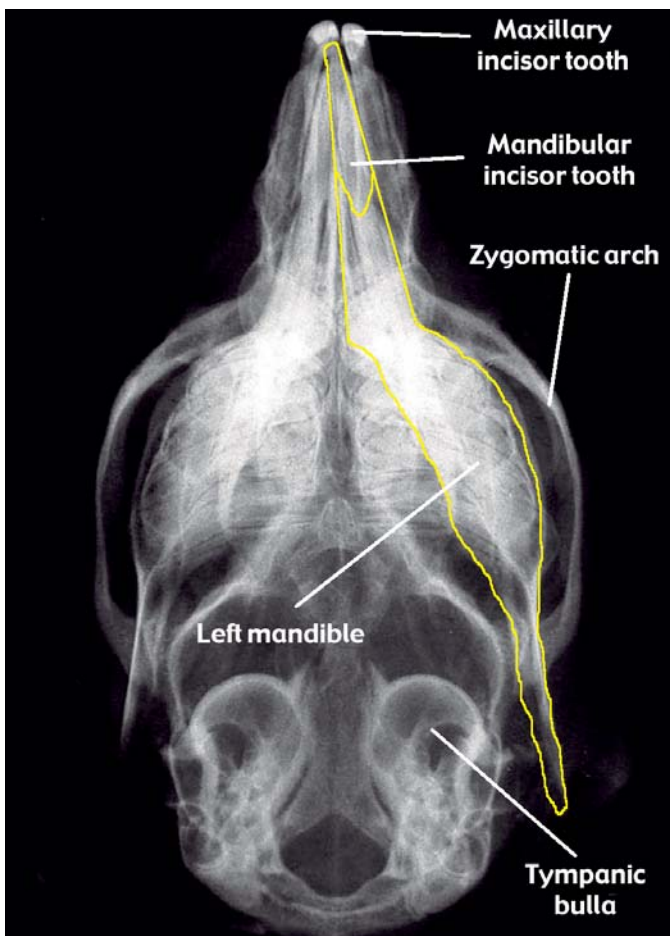


## Skull Radiograph (cadaver): Lateral Oblique View



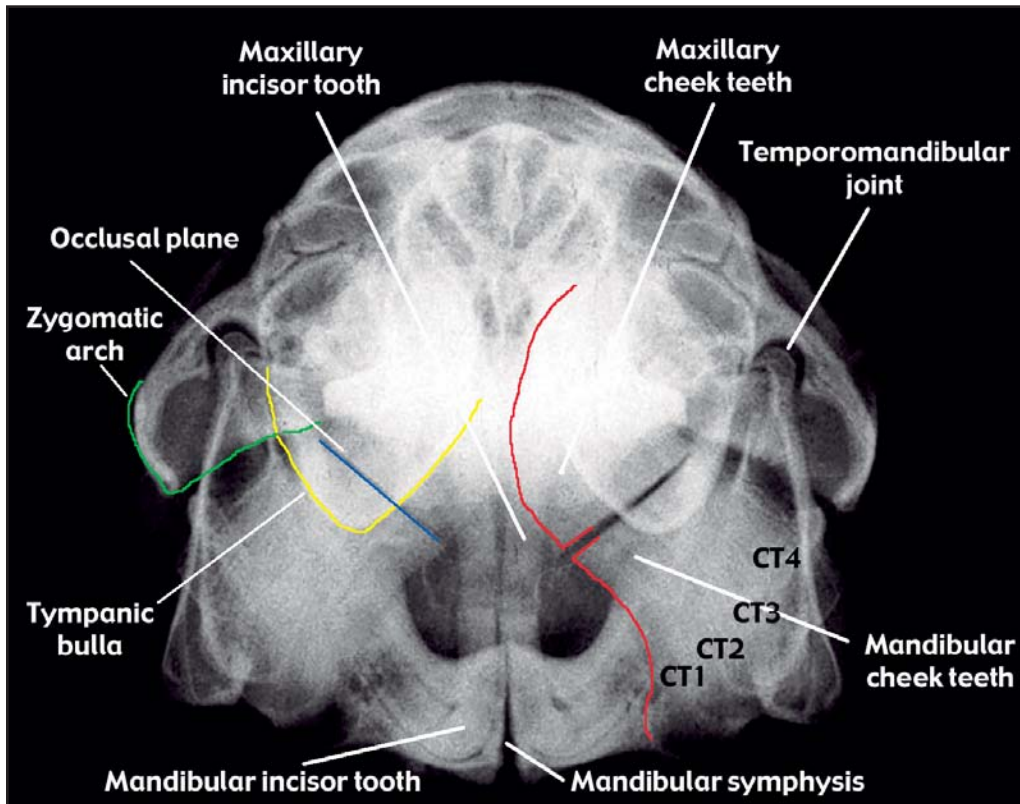
**Fig 2.** This view allows better visualization of the mandibular cheek teeth roots on one side and the maxillary cheek teeth roots on the opposite side. This view is also helpful to evaluate the apex of the incisor teeth, which is obscured on a lateral view (red circle). The contralateral oblique view should always be obtained to compare findings.

## Skull Radiograph (cadaver): Ventrodorsal View



**Fig 3.** This view is rarely helpful due to superimposition of dental and cranial structures, making interpretation difficult. However, severe dental overgrowth and alteration of the normal bony profile may be identified.

## Skull Radiograph (cadaver): Lateral Oblique View



**Fig 4.** Note the marked vestibular curvature of the maxillary cheek teeth and the lingual curvature of the mandibular cheek teeth (red lines). Therefore, the occlusal plane (blue line) is oblique in a buccodorsal-linguoventral direction. The temporomandibular joint and the mandibular symphysis are clearly visible.

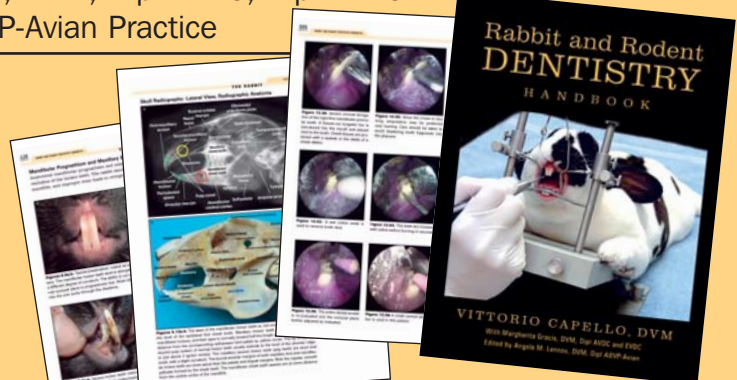


# RABBIT AND RODENT DENTISTRY HANDBOOK

Vittorio Capello, DVM with Margherita Gracis, DVM, Dipl EVDC, Dipl AVDC  
Edited by Angela M. Lennox, DVM, Dipl ABVP-Avian Practice

**“It is excellent value and should be compulsory reading for any clinician working with small mammals.”**

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