

**ADVANCED DENTAL TECHNIQUES-
APPLYING DENTAL NERVE BLOCKS IN
RABBITS**

INTRODUCTION



NERVE BLOCKS ARE USED PRE- AND POST OPERATIVELY IN CASES WHERE DENTAL PAIN IS ASSUMED TO BE SEVERE



THERE ARE FIVE DIFFERENT BLOCKS THAT ARE ACCESSIBLE AND COMMONLY USED.



LIDOCAINE (2-4MG/KG) OR BUPIVACAINE (1-2MG/KG) ARE APPROPRIATE AGENTS- IN ALL CASES CALCULATE THE DOSE AND DILUTE WITH STERILE WATER IF THE VOLUME IS SMALL



SOME PRACTITIONERS ADD OPIATES INTO THE NERVE BLOCK TO IMPROVE THE LONGEVITY AND QUALITY OF THE ANALGESIA- REMEMBER TO INCLUDE THIS AS PART OF YOUR TOTAL OPIATE DOSE



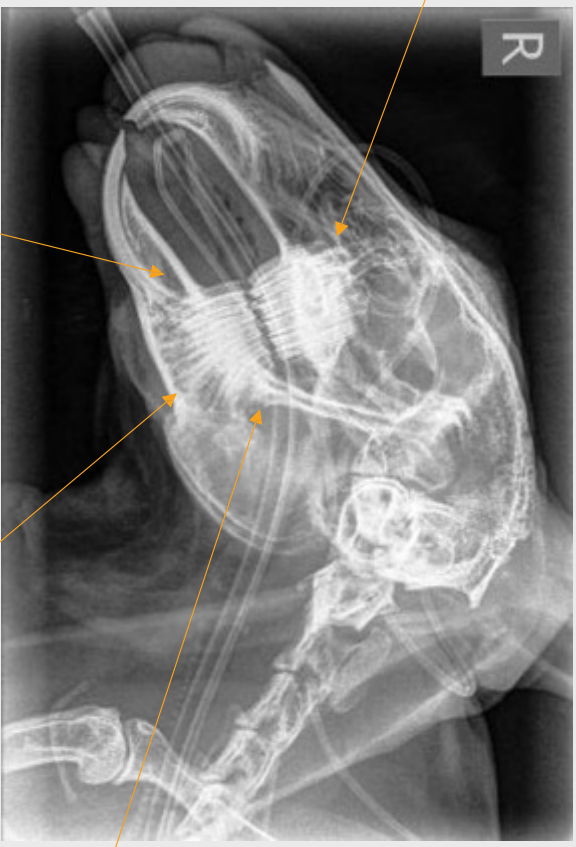
SOME OF THE NERVE BLOCKS CAN BE PERFORMED EITHER INTRA- OR EXTRA-ORALLY

DRUGS

- Lidocaine- rapid onset of action, intermediate duration. Addition of adrenaline can improve duration of action, by reducing rate of systemic absorption. Do NOT give solutions containing adrenaline with lidocaine IV. Adverse reactions include seizures, bradycardia and hypotension. May react with propranolol and cimetidine if administered concurrently.
- Bupivacaine- slower onset of action (20-30 mins) but duration of action prolonged (6-8hrs). Doses above 2mg/kg may be associated with systemic side effects. Must NOT be given IV- may precipitate significant cardiac arrhythmias. Reduce dose if used in combination with lidocaine

ANATOMY!!!

Infra-orbital
foramen



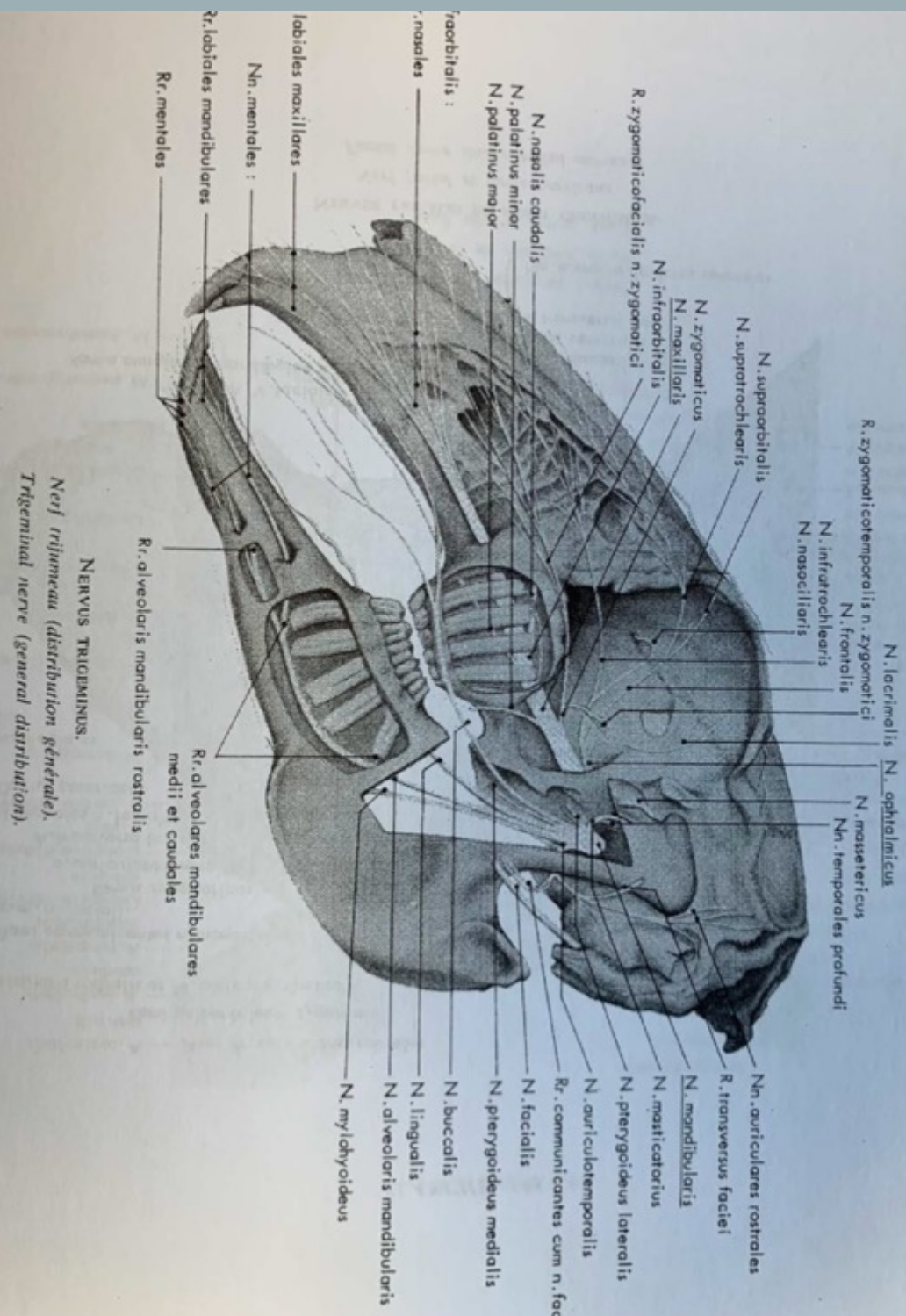
Mental foramen

Mandibular incisure

Inferior alveolar
foramen

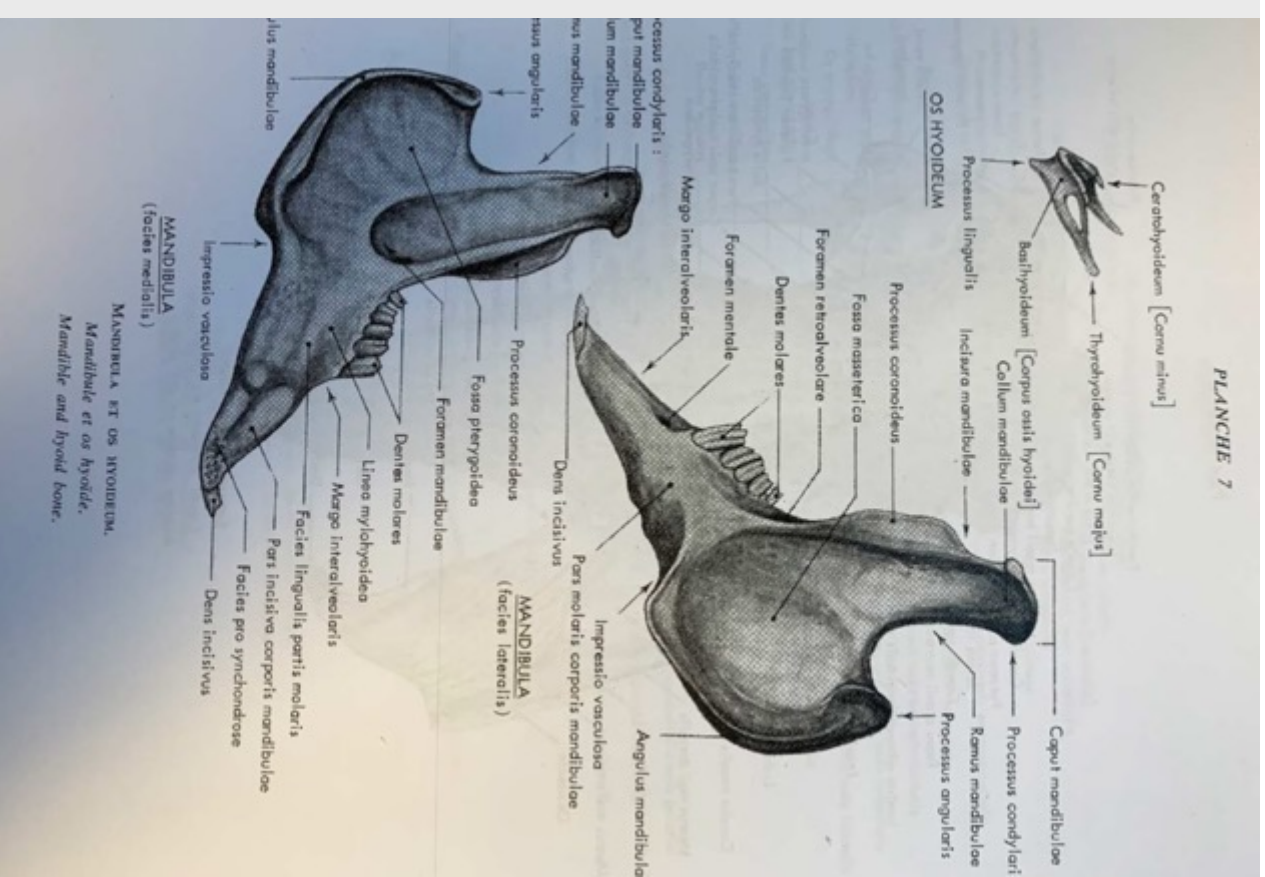
NERVES OF THE RABBIT HEAD

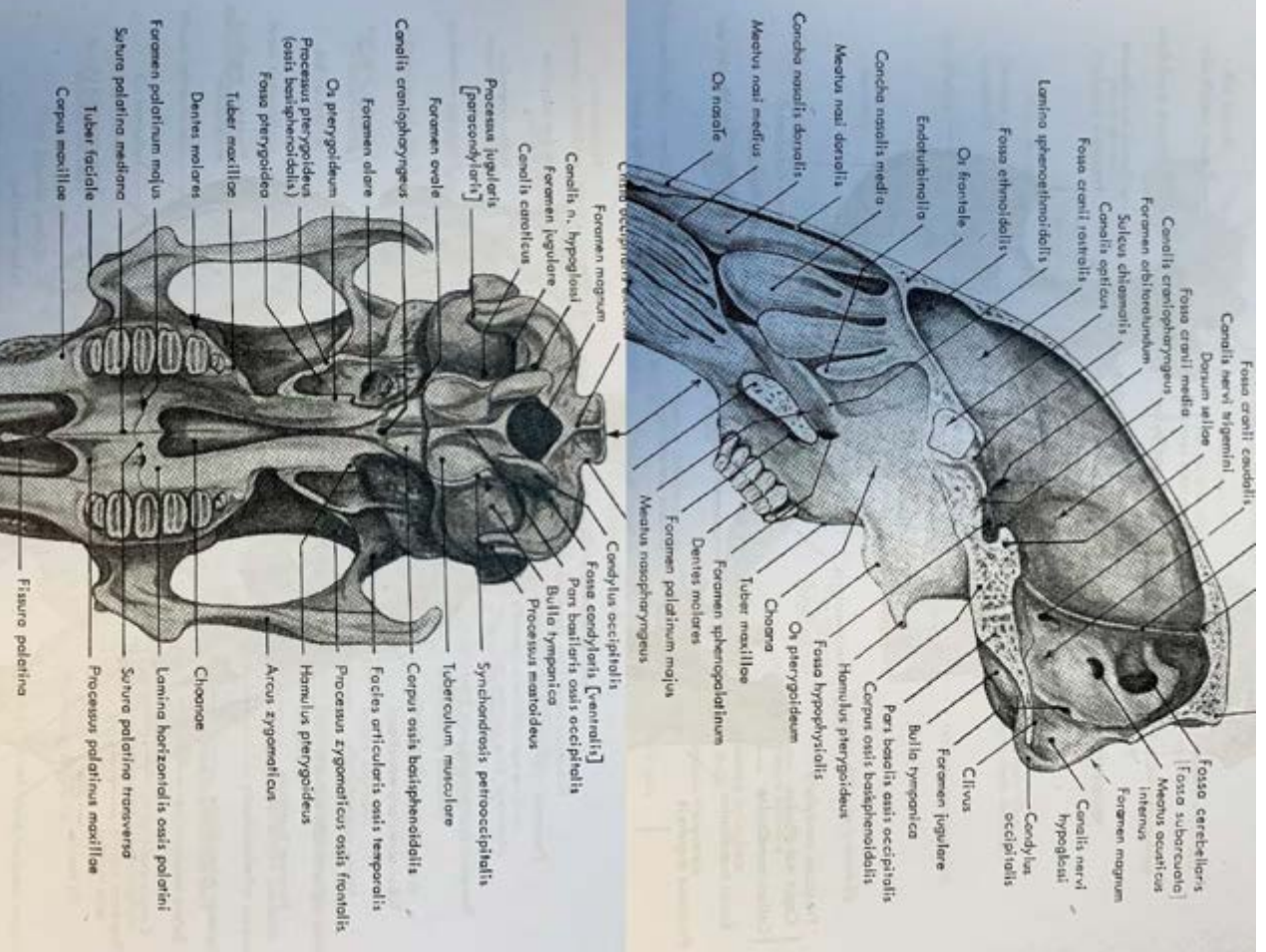
PLANCHE 143



INFERIOR ALVEOLAR NERVE BLOCK

- Landmark- mandibular incisure
- Insert needle 10-11mm MEDIAL to mandibular ramus
- Angle of 120 degrees
- Confirm NOT in a blood vessel
- Inject calculated dose of drug



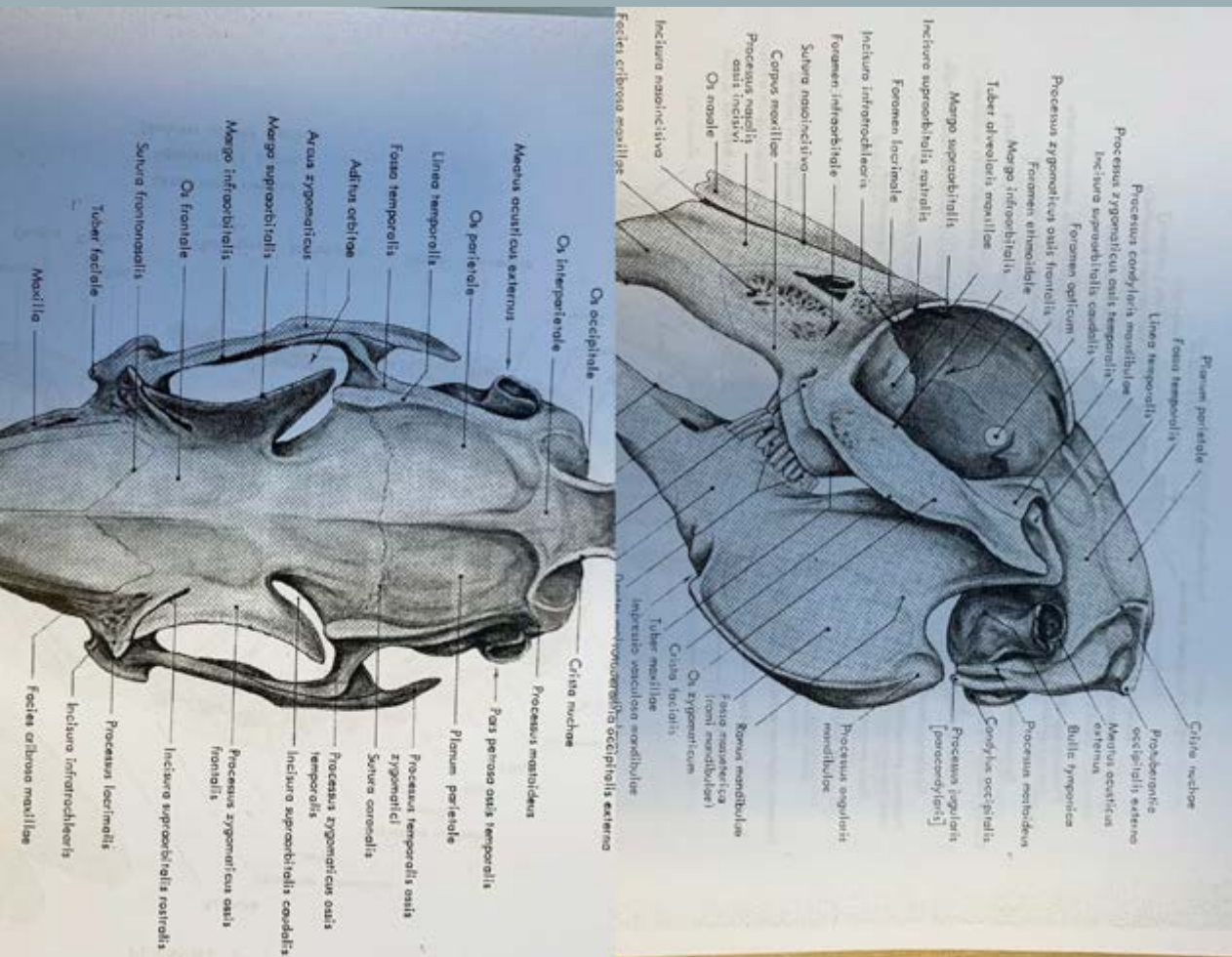


PALATINE NERVE BLOCK

Land-mark- Upper CT 3 lingual surface

Half-way between tooth and palatine midline

INFRAORBITAL NERVE BLOCK



MENTAL NERVE BLOCK

- Land-mark- rostral edge of mandibular CT I
- Dorsal third of mandible 4-10mm rostral to CT I, and 12mm + caudal to incisors

