

<b>Diagnostic procedures:</b>	<b>Diagnostic results:</b>
Serum chemistry	Alkaline phosphatase increased
Urinalysis and Urine Sedimentation	Urine specific gravity increased
Radiography of skull	Cortical thickening skull Osseous proliferation skull

**Treatment/Management/Prevention:  
SPECIFIC**

1) There is no specific treatment.

**SUPPORTIVE**

1) Supportive care and adequate nutrition should be maintained.

2) Symptomatic treatment for pain is indicated. NSAIDs can be used to control pain. Though in theory they should all be equally efficacious, some patients appear to respond better to one over another; thus, failure to achieve an analgesic effect with one drug does not imply lack of response to all NSAIDs. In all patients, NSAIDs should be avoided in the presence of renal or hepatic dysfunction, coagulopathies, gastrointestinal disorders, shock, hypotension/hypovolemia, hypoalbuminemia or pregnancy. Dogs on chronic therapy should be monitored periodically for alterations in hematological or biochemical parameters, and their owners should be instructed to watch for signs of gastrointestinal upset, alterations in appetite, and polyuria/polydipsia.

- Aspirin or buffered aspirin: 10-25 mg/kg q8-12h or as needed: Discontinue if vomiting occurs.
- Carprofen (Rimadyl): 2 mg/kg PO q 24h
- Deracoxib (Deramaxx): For chronic dosing use 1-2 mg/kg PO q 24 hr as needed.
- Etodolac (EtoGesic): 10-15 mg/kg PO q24h
- Firocoxib (Previcox): 5 mg/kg PO q 24 hr. Do not use in puppies less than 7 months of age or in dogs weighing less than 7 pounds.
- Meloxicam: 0.2 mg/kg first dose; then 0.1 mg/kg thereafter q 24 hr PO.
- Tepoxalin (Zubrin): 20 mg/kg PO q24h x 1 treatment; then 10 mg/kg PO q 24 h. This is similar to carprofen and ketoprofen.

3) Misoprostol (Cytotec): 2-5 micrograms/kg q6-12h: It may be used prophylactically in animals receiving high doses of NSAIDs to prevent gastric ulceration. This is a synthetic prostaglandin E1. It may cause diarrhea, vomiting, abdominal pain, and abortion in pregnant animals.

**Preventive Measures:**

Because a familial tendency is suspected, it may be best to avoid breeding affected dogs and to not repeat the sire-dam breeding that resulted in an affected pup.

**Differential Diagnosis:**

- Osteomyelitis
- Craniomandibular osteopathy
- Neoplasia

**References:**

- 1) Pastor KF, Boulay JP, Schelling SH, Carpenter JL: Idiopathic hyperostosis of the calvaria in five young bullmastiffs. J Am Anim Hosp Assoc 2000 Vol 36 (5) pp. 439-445.
- 2) McConnell JF, Hayes A, Platt SR, Smith KC: Calvarial hyperostosis syndrome in two bullmastiffs. Vet Radiol Ultrasound 2006 Vol 47 (1) pp. 72-77.
- 3) Fischetti AJ, Lara-Garcia A, Gross S: What is your diagnosis? Idiopathic calvarial hyperostosis. J Am Vet Med Assoc 2006 Vol 229 (2) pp. 211-212.
- 4) Muir P, Dubielzig RR, Johnson KA, et al: Hypertrophic osteodystrophy and calvarial hyperostosis. Compend Contin Educ Pract Vet 1996 Vol 18 (2) pp. 143-151.
- 5) Grondalen J: Metasphyseal osteodystrophy (hypertrophic osteodystrophy) in growing dogs: A clinical study. J Small Anim Pract 1976 Vol 17 pp. 721.

**Feedback:**

If you note any error or omission or if you know of any new information, please send your feedback to [Associate@vin.com](mailto:Associate@vin.com).

If you have any questions about a specific case or about this disease, please post your inquiry to the appropriate message boards on VIN.

*How can I tell my epr 15 Aug on  
to have finger*