

— Abstract —

**A Heterotopic Ossification in the Subscapularis Muscle
- Case Report -**

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We report the case of a heterotopic ossification in the subscapularis muscle. A 30-year-old woman was diagnosed as a heterotopic ossification in the right subscapularis muscle. X-rays, a CT scan and a MRI showed bone-like lesions in the muscle. The location of the ossification was both inferior and anterior to the joint. The mass nearly bridged between the proximal humerus and the inferior portion of the coracoid process. Symptoms did not respond to rest, NSAIDs for 3 months and to stretching exercises treatment for 6 months. Excision and biopsy was performed through deltopectoral approach. Disodium Etidronate was administered during the postoperative period. She regained normal range of motion postoperatively and improved in the shoulder pain after performing strengthening exercises with Therabands. We think that a cause of limitation of the shoulder was impingement between the mass and the coracoid process, and that another cause was adhesion between the mass and the joint capsule. We conclude that excision and postoperative rehabilitation exercises are good methods for a heterotopic ossification in the subscapularis muscle for those that are nonresponsive to nonoperative treatments.

Key Words: Subscapularis muscle, Heterotopic ossification

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*

1980
가
(Table
1)¹⁻⁷⁾.

30 가 10 mm 30 mm x 10 mm 2 25 mm x 10

Table 1. Domestic articles on heterotopic ossification.

Articles	HTO in the shoulder/ Total
大整83()	0/12
大整91()	0/52
大整92()	0/35
大整93()	0/9
大整99()	0/1
大整01()	0/10
大膝02()	0/6
Total	0/115

HTO: Heterotopic ossification

大整:

大膝:

mm 2 25 mm x 10 (Fig. 1).
T₁ T₂ 가
가
, Tc-99m
phosphate uptake 가 (Fig. 2). 3
(rest)
120°
30°



Fig. 1. Plain X-rays of the right shoulder showing the extent of the heterotopic ossification between the proximal humerus and at the vicinity of the coracoid process.

6 stretching

Disodium Etidronate 400mg

5

140°

60°

Therabands

3

Tug test⁹⁾

가 (ASES score) 90

Zonal phe-

nomenon

(Fig 3).

stretching

2

3

가

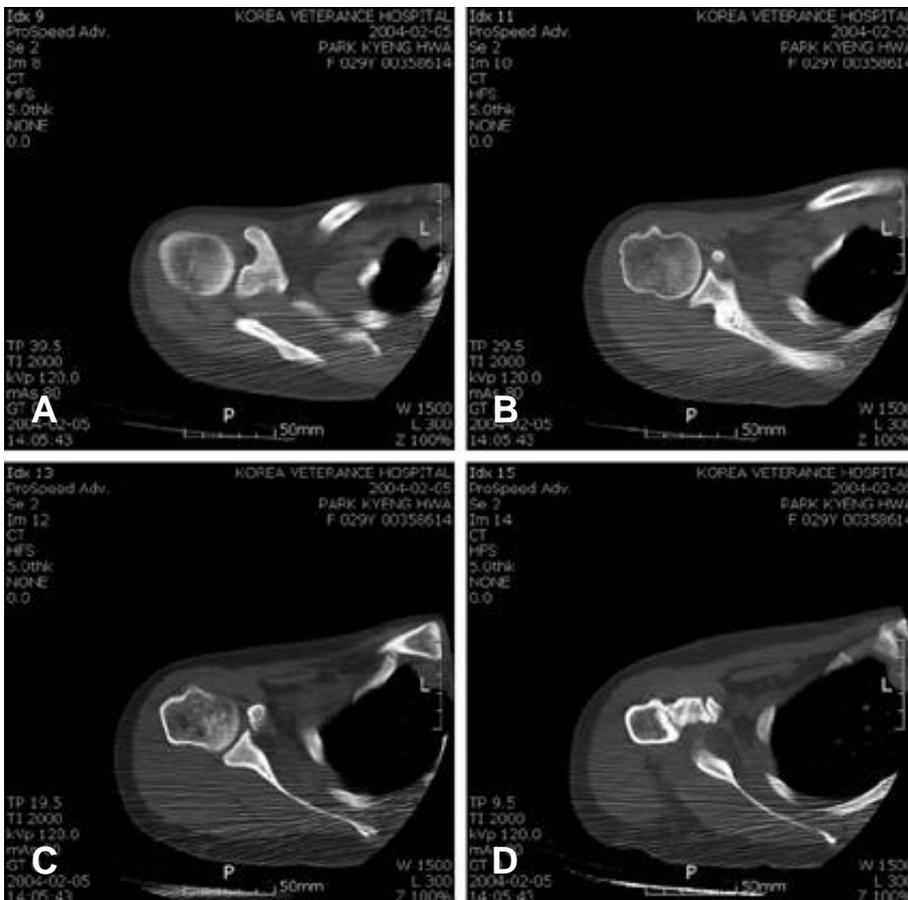


Fig. 2. CT scans of the shoulder showing the mass in the subscapularis muscle.

10

22



Fig. 3. Bone scans showing slightly increased uptake in the shoulder.

(forming a bridging bone) (forming a bridging bone) 8,13,14)

가 Mature stage

가

(Fibrous

bridge)

(Closed manipulation)

Warner 13)

가

stretching stretching

6

가

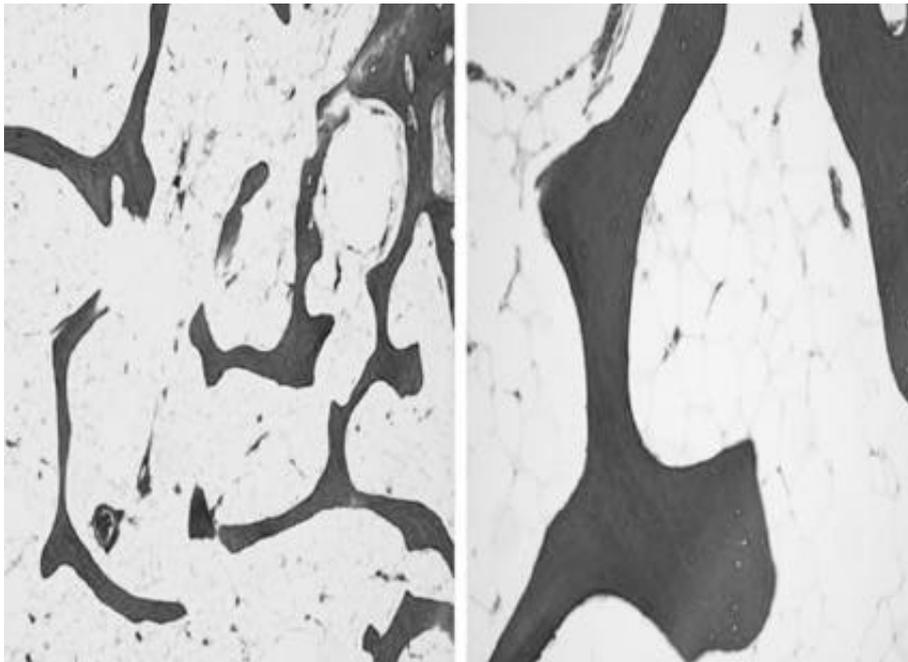


Fig. 4. There are only mature bone trabeculae without zonal phenomenon.

(Hydroxyapatite crystals)

¹²⁾

가

¹²⁾

가

(Mesenchymal cell)가

¹¹⁾

Disodium Etidronate

가

stretching

uptake 가

가

가

Wenner¹⁴⁾

(Neuropraxia),

Diphosphonates

, Warner¹³⁾

1

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:

가

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Tug test⁹⁾

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Diphosphonates

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¹⁰⁾, Diphosphonates(Compounds containing P-C-P bonds)

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(Calcium phosphate)

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