



NHS MEDICAL POLICY

Radiation therapy for preventing heterotopic ossification Procedure 2014-008

Background

Heterotopic ossification is an overgrowth of bone that frequently occurs after a bone fracture. It commonly occurs after fractures of the spine, hip, or elbow. It can cause pain and disability and may require future surgery. Radiation therapy may be considered medically necessary to prevent heterotopic ossification in people at high risk of developing the condition.

Radiation therapy may be indicated to prevent heterotopic ossification when **ALL** the following are present:

1	The provider documented that the member is at high risk for heterotopic ossification and why.
2	The radiation therapy is planned to be done within a month of the onset or identification of the risk factor for heterotopic ossification.
3	<p>One of the following risk factors is present:</p> <ul style="list-style-type: none"> • Previous heterotopic ossification • Severe extremity trauma • Severe head injury • Spinal cord trauma • Ankylosing spondylitis • Diffuse idiopathic skeletal hyperostosis (DISH) • Paget disease • Spinal stenosis • Hypertrophic osteoarthritis

SOURCES

1. Anglen JO; Moore KD. Prevention of heterotopic bone formation after acetabular fracture fixation by single-dose radiation therapy: a preliminary report. J Orthop Trauma; 10(4); 258-63 1996.
2. Hamid N, et al, Radiation therapy for heterotopic ossification prophylaxis acutely after elbow trauma: a prospective randomized study, J Bone Joint Surg Am. 2010 Sep 1;92(11):2032-8.
3. Lo TC. Radiation therapy for heterotopic ossification. Semin Radiat Oncol, 01-Apr-1999; 9(2): 163-70 1999.
4. Seegenschmiedt MH et al. Prevention of heterotopic ossification about the hip: final results of two randomized trials in 410 patients using either preoperative or postoperative radiation therapy. Int J Radiat Oncol Biol Phys; 39(1), 161-71 1997.
5. Seegenschmiedt MH et al. Radiation prophylaxis for heterotopic ossification about the hip joint-a multicenter study. Int J Radiat Oncol Biol Phys, 51(3): 756-65 2001.
6. Sell S et al. The suppression of heterotopic ossifications: radiation versus NSAID therapy-a prospective study. J Arthroplasty; 13(8): 854-9 1998.

CODE REFERENCE (This may not be a comprehensive list of codes to apply to this policy.)

CPT 77401, 77776, 77777, 77778

POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
09/25/2015	Annual review and approval by UM Committee
09/14/2016	Annual review and approval by UM Committee
09/12/2017	Annual review and approval by UM Committee
09/12/2018	Annual review and approval by UM Committee
09/12/2019	Annual review and approval by UM Committee
09/10/2020	Annual review and approval by UM Committee
09/10/2021	Annual review and approval by UM Committee
09/19/2022	Annual review and approval by UM Committee
08/23/2023	Annual review and approval by UM/QM Committee
08/23/2024	Annual review and approval by UM/QM Committee