

Special Issue ·

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노인의 근골격계 질환

Senile Musculoskeletal Disorder

388 - 1

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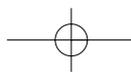
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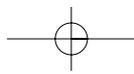
Abstract

Musculoskeletal injuries and diseases are common in the elderly. Muscle weakness, fatigue, limited joint motion, and pain can affect the quality of life. Patients with senile osteoporosis, characterized by decreased bone formation compare to bone resorption, may not have symptoms until they experience a fracture, and frequently the disease is too advanced to have a good outcome. The density of bone mineral alone could not explain osteoporotic fractures, and the bone quality, such as micro - structure, microdamage, calcification and collagen composition, also affect the bone strength in the elderly. Osteoporotic fracture, although can be caused by a minor trauma and usually not unstable, may cause a significant morbidity and even mortality, which is related to a decrease in ambulation, especially in hip fracture. Spine fracture may also deteriorate the lung function slowly and can affect the 5 - year survival. Operative treatment is indicated in most hip fractures and ambulation should be tried early to prevent complications. Most of other fractures could be managed conservatively, but percutaneous bone cement augmentation (vertebroplasty or kyphoplasty) may be applied to selective spine fractures. Medical management should be applied to prevent fracture, and a 40~50% reduction of further fracture can be obtained even though BMD improvement is not very significant. Degenerative arthritis is another chronic disorder in the elderly, and can be managed conservatively at first. However, severe disability due to joint pain and limited motion should be managed by total joint replacement, even in patients over 80 years of age, if medical problems be carefully managed.

Keywords : Senile Osteoporosis; Osteoporotic fracture; Hip fracture; Spine fracture; Distal radius fracture

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200

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5~10

가 (5, 6).

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microCT MRI 3

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가 , (fatigue micro-crack)

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T-score (1).

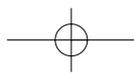
70% , 20~

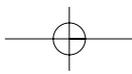
30% 가

가 (peak bone mass)

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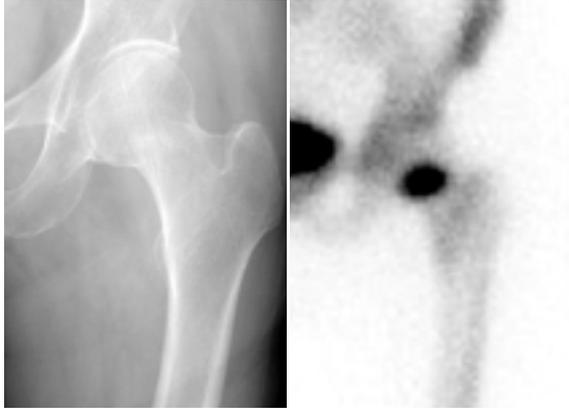
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Special Issue ·

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(7).

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(avulsion)

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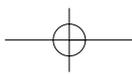
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2. A)
B)
C)
D)

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Dynamic hip screw

Trochanteric stabilizing plat

Proximal Femoral Nail(PFN)

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(8, 9).

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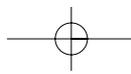
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), 65

(50%

glucosamine sulfate proteoglycan
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(7).

1. Taaffe DR, Marcus R. Musculoskeletal health and the older

adult. J Rehab Res Dev 2000; 37: 245 - 54

2. Leveille SG. Musculoskeletal aging. Curr Opinion in Rheum 2004; 16: 114 - 8

3. Bouxsein ML. Biomechanics of Age related Fractures. In: Marcus R, Feldman D, Kelsey J. Osteoporosis. 2nd ed. San Diego: Academic Press, 2001: 509 - 31

4. Einhorn TA. The Roles of Osteoporosis and Falls in Hip Fractures in the elderly. In: Apple DF, Hayes WC. Prevention of Falls and Hip Fractures in the Elderly. 1st ed. Rosemont: Am Aca Orthop Surg, 1993: 19 - 32

5. Gardner MJ, Lorch DG, Lane JM. Osteoporotic femoral neck fractures: management and current controversies. Instr Course Lect 2004; 53: 427 - 39

6. Gundle R, Gargan MF, Simpson AH. How to minimize failures of fixations of unstable intertrochanteric fractures. Injury 1995; 26: 611 - 4

7. Goldberg VM, Buckwalter JA, Hayes WC, Koval KJ. Orthopaedic Challenges in an Aging Population. Instr Course Lect 1997; 52: 417 - 22

8. Erk JC, Hodges SD, Humphreys SC. Vertebroplasty: A new treatment strategy for osteoporotic compression fractures. Am J Orthop 2002; 31: 123 - 8

9. Phillips FM, Pfeifer BA, Liebermann IH, Kerr EJ 3rd, Choi IS, Pazzianos AG. Minimally invasive treatments of osteoporotic vertebral compression fractures: vertebroplasty and kyphoplasty. Instr Course Lect 2003; 52: 559 - 67

10. . 27 . . In: . : , 2004: 74 - 6

11. Heikinheimo R, Jalonen - Mannikko A, Asumaniemi H, Lehtomaki E. External hip protectors in home - dwelling older persons. Aging Clin Exp Res 2004; 16: 41 - 3

