

[]

:

25 2 (60 65) 34 59 1 (55 60) T - score

Z - score 가

:

(H) T - score 1 L = 0.751 × H - 0.195,

2 L = 0.912 × H + 0.31 , Z - score L = 0.647 × H - 0.656

(1), L = 0.897 × H - 0.481 (2) .

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2001

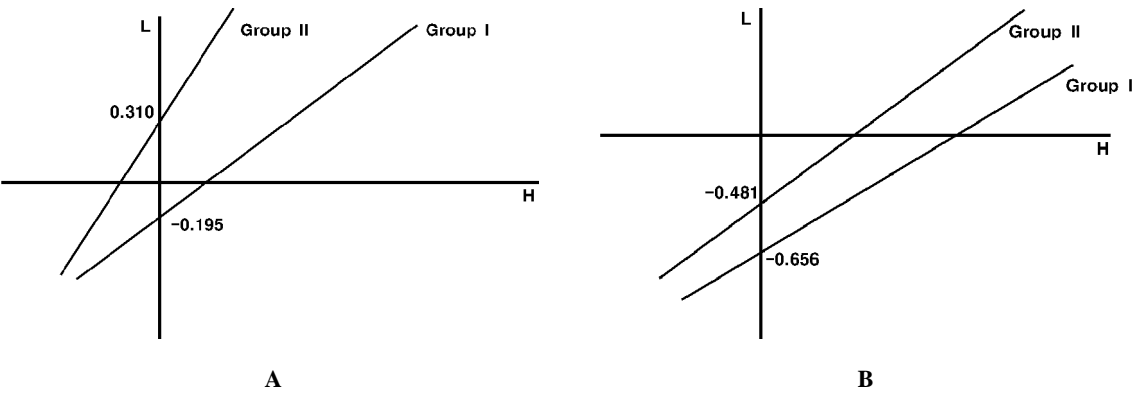


Fig. 1A. Graph showing the correlation of BMD results between group I and II (T-score).
1B. Graph showing the correlation of BMD results between group I and II (Z-score).

Table 1. The mean value of proximal femur and spine and the correlation value between 2 sites

	Proximal femur		Spine		Correlaton	
	Group I	Group II	Group I	Group II	Group I	Group II
T-score	-2.84	-3.77	-2.32	-3.16	0.629	0.706
Z-score	-0.70	-1.30	-1.11	-1.68	0.545	0.686

-1.3, 가 -1.68 (Table 1). 70 2020
1 0.545, 2 600 7,17)
0.685 ,
(sifnificance<0.01; Table 1).
1 가
T-score (L) , (Morbidity)
(H) L =
0.751×H-0.195 , 2 L = (Mortality)
0.912×H+0.310 (Fig. 1A). 가 Z- 24)
score 1 L = 0.647×H-0.656 ,
2 L = 0.897×H-0.481 (Fig. X-ray Singh index
1B). ,
가
22). 1963 Camerun Sorrenson⁵⁾
가
가
6,8,23)

4). 가

3,15, 18).

16,21).

50 가 , estrogen 가 ,

10). 20).

WHO 가 -2.5 SD 가 -1.0 SD -2.5 SD , -1.0 SD Riggs 19)

(Radiographic absorptiometry; RA), (Single photon absorptiometry; SPA), (Dual photon absorptiometry; DPA), (Dual energy X-ray absorptiometry; DEXA), (Quantitative computed tomography; QCT) , 0.965 g/cm2 .

(Quantitative ultrasound; QUS) Lane 14) 가 1.5~3 가 , -2.5 SD 30% , , Buchanan 2)

(Quantitative magnetic resonance; QMR) DEXA QCT 가 (QCT) 가 70~100 mg/cm3 70 mg/cm3 가

DEXA 가 , QCT 가

DEXA 가 1,11,13).

가 , , T-score , 가

Z-score . T-score 가 가

가

Z-score (sex-, age-matched) 가 가

가 ,

2.5 (standard deviation; SD) 가

12). 30 1 5 가

가 가

가

9).

가

T-score Z-score

가

가

가

가

1

2

T-score Z-score

가

2

가 1

가

가

가

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Abstract**Correlation Analysis of BMD in Proximal Femur and Spine****Jun-Young Yang, M.D., Young-Mo Kim, M.D.***Department of Orthopedic Surgery, School of Medicine,
Chungnam National University, Taejon, Korea*

Purpose: To analogize the result of the test through explaining the correlation of bone mineral density (BMD) test value between proximal femur and lumbar spine.

Materials and Methods: It is based on 59 cases who visited the out-patient department. They were classified into two groups by age, group I (55~59 yr) and II (60~64 yr). Then we evaluated the average and the degree of correlation between the two groups and analyzed the correlation of the two sites according to the T & Z-score through the regression analysis.

Results: In T-score, the correlation between L (independent variable, lumbar) and H (dependent variable, femur) indicated that $L = 0.751 \times H - 0.195$ for group I and $L = 0.912 \times H + 0.31$ for group II. In Z-score, the correlation was $L = 0.647 \times H - 0.656$ for group I and $L = 0.897 \times H - 0.481$ for group II.

Conclusion: It is regarded that there will be a clinical availability which can analogize the result of a part by using the result of the other part.

Key Words: Bone mineral density, Proximal femur, Lumbar spine, Correlation

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