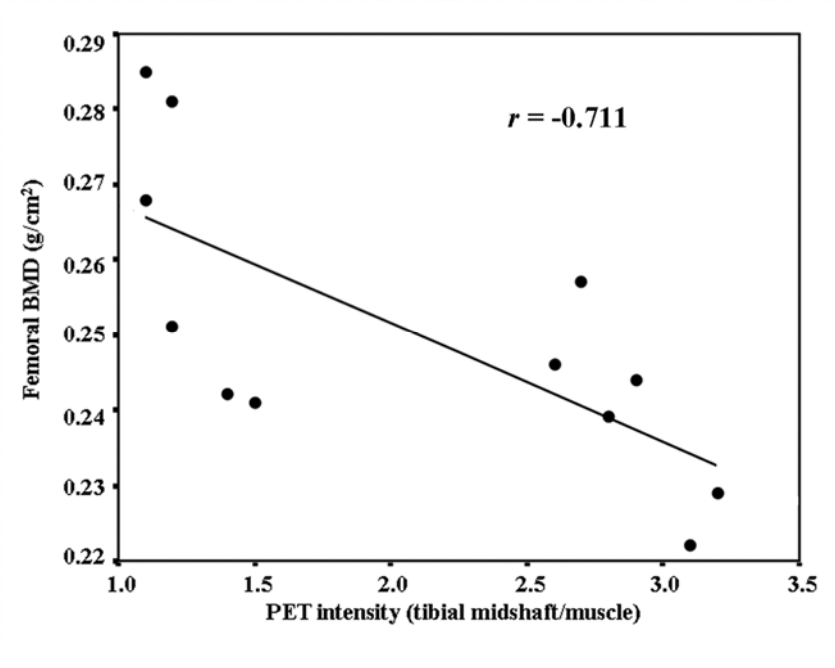
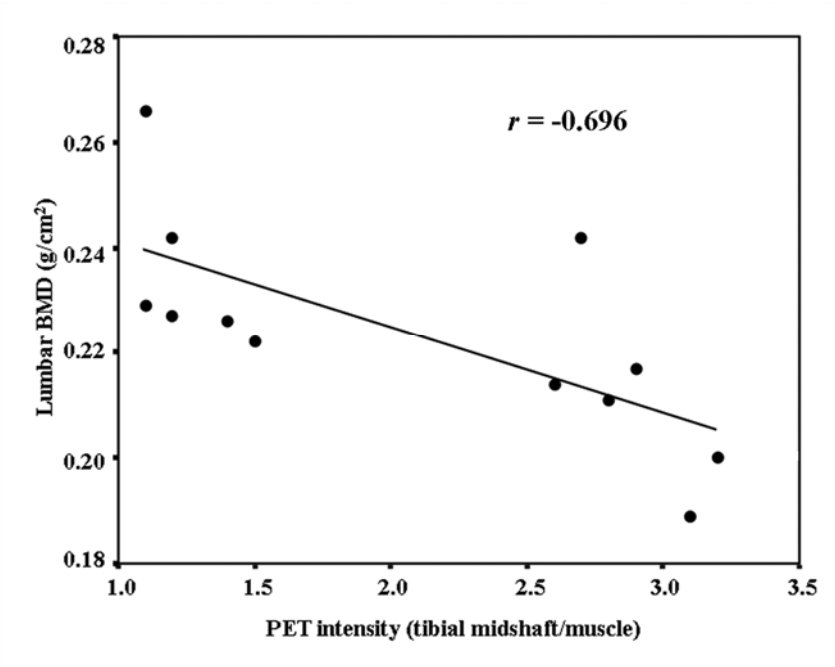
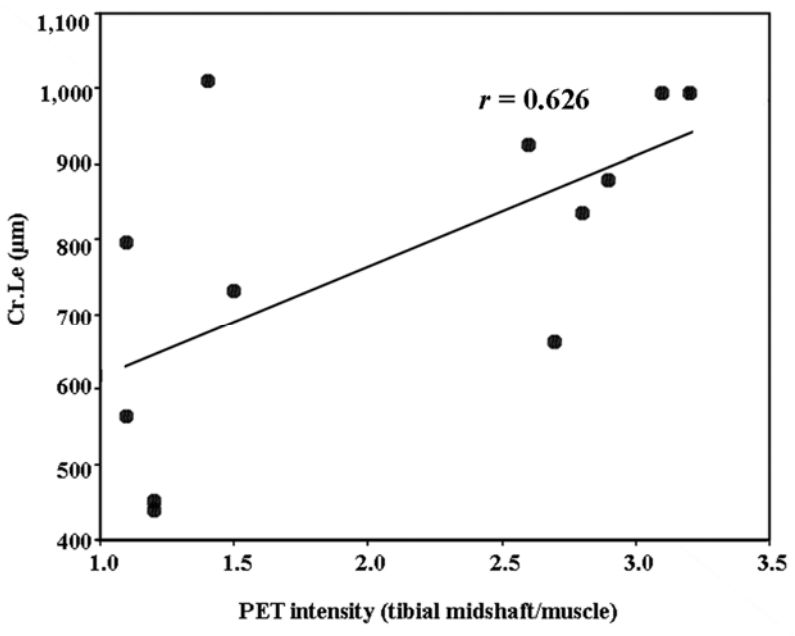
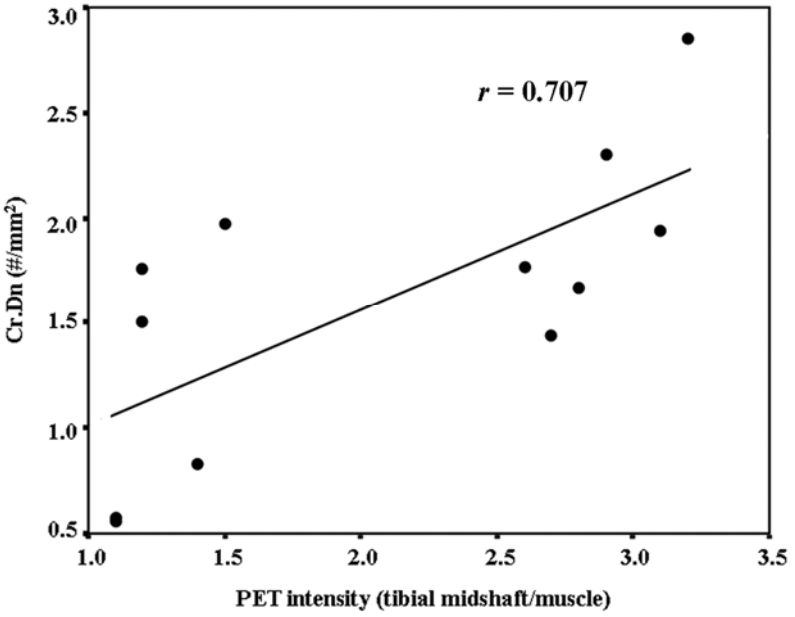

r = -0.711
Femoral BMD (g/cm²)
0.29
0.28
0.27
0.26
0.25
0.24
0.23
0.22
1.0
1.5
2.0
2.5
3.0
3.5
PET intensity (tibial midshaft/muscle)


r = -0.696
Lumbar BMD (g/cm²)
0.28
0.26
0.24
0.22
0.20
0.18
1.0
1.5
2.0
2.5
3.0
3.5
PET intensity (tibial midshaft/muscle)


1,100
1,000
900
800
700
600
500
400
Cr.Le (μm)
r = 0.626
1.0
1.5
2.0
2.5
3.0
3.5
PET intensity (tibial midshaft/muscle)


3.0
2.5
2.0
1.5
1.0
0.5
Cr.Dn (#/mm²)
r = 0.707
1.0
1.5
2.0
2.5
3.0
3.5
PET intensity (tibial midshaft/muscle)

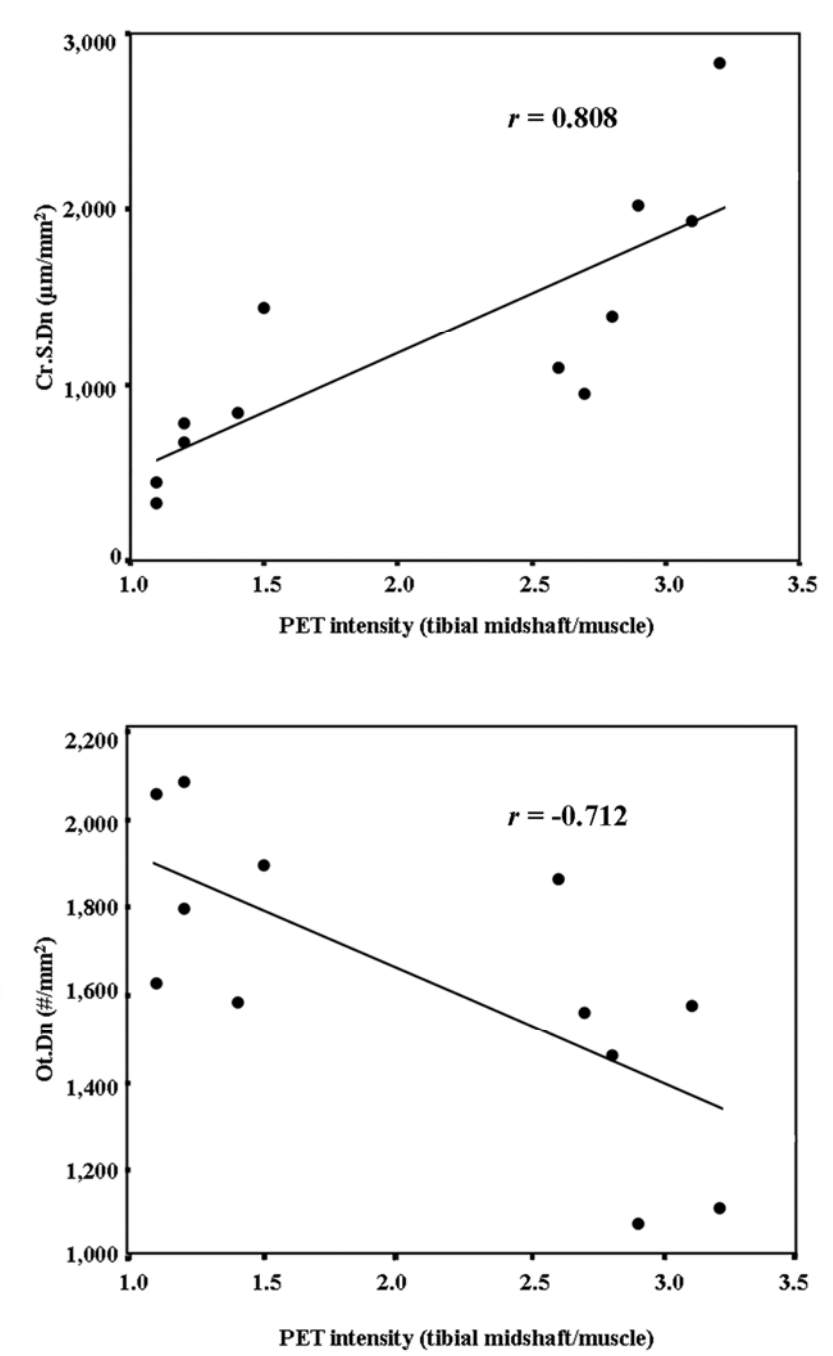


FIGURE 1. Correlation between PET intensity and BMD or microdamage histomorphology (Cr.Le, Cr.Dn and Cr.S.Dn) or Ot.Dn in loaded limbs. **(A)** Correlation between PET intensity and femoral BMD (n=12, $P<0.05$); **(B)** Correlation between PET intensity and lumbar BMD (n=12, $P<0.05$); **(C)** Correlation between PET intensity and Cr.Le (n=12, $P<0.05$); **(D)** Correlation between PET intensity and Cr.Dn (n=12, $P<0.05$); **(E)** Correlation between PET intensity and Cr.S.Dn (n=12, $P<0.05$); **(F)** Correlation between PET intensity and

Ot.Dn ($n=12$, $P<0.05$)

Cr.Le: microcrack length; Cr.Dn: microcrack density; Cr.S.Dn: microcrack surface density; Ot.Dn: osteocyte lacunar density

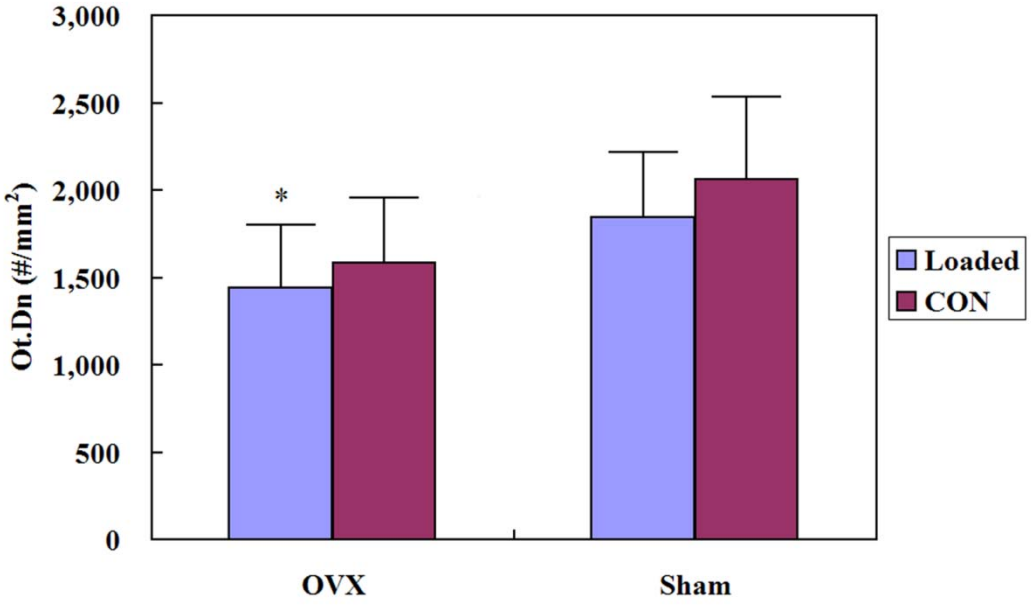


FIGURE 2. Ot.Dn was significantly lower (P <0.05) in loaded tibiae of the OVX group than those in the loaded tibiae of the Sham group. Data were expressed as means±SD (n=6 in each group)

*P<0.05, ΔOt.Dn in OVX vs. ΔOt.Dn in Sham

Ot.Dn: osteocyte lacunar density