Evaluasi kuat tekan scaffold hidroksiapatit/alginat dan scaffold hidroksiapatit/alginat/kitosan = Evaluation of compressive strength hydroxyapatite/alginate scaffold and hydroxyapatite/alginate/chitosan scaffold

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Abstrak

ABSTRAK
Penelitian ini bertujuan untuk mengetahui kuat tekan scaffold HA/Alginat dan HA/Alginat/Kitosan. Setiap sediaan scaffold HA/Alginat 30/70 dan HA/Alginat/Kitosan 30/50/20 di uji kuat tekan dengan beban maksimum 100 N, hingga deformasi 50 menggunakan Universal Testing Machine, dan nilai kuat tekan dihitung dengan persamaan S = Fmax/A. Hasil menunjukkan bahwa kuat tekan scaffold HA/Alginat 30/70 dan HA/Alginat/Kitosan 30/50/20 , secara berurutan, yaitu 0,15 0,053 dan 0,05 0,031 MPa, yang keduanya berbeda bermakna p < 0,05 . Disimpulkan bahwa scaffold HA/Alginat/Kitosan 30/50/20 memiliki kuat tekan lebih rendah dibandingkan scaffold HA/Alginat 30/70 .
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ABSTRACT
The aim of this study was to identify the compressive strength of HA Alginate and HA Alginate Chitosan scaffolds. All HA Alginate 30 70 and HA Alginate Chitosan 30 50 20 scaffolds were compressed with 100 N load maximum up to 50 deformation using the universal testing machine and the value of compressive strength was calculated by S Fmax A. Compressive strength values of HA Alginate 30 70 and HA Alginate Chitosan 30 50 20 scaffolds are 0,15 0,053 and 0,05 0,031 MPa, respectively, which is significantly different p 0,05 . It was concluded that HA Alginate Chitosan 30 50 20 scaffold had lower compressive strength than HA Alginate 30 70 scaffold.