



Journal of Biomedical Sciences, ISSN 2254-609X, Vol.8 No.3:16. The article discusses the effect of aging on the surface roughness and mechanical properties of a material. The study involves X-ray diffraction (XRD) and nano-indentation tests. The XRD patterns show peaks corresponding to Ni(111), Ni(200), Ni(220), Ni(311), and Ni(222) planes. The surface roughness (Ra) increases with aging time, while the maximum load (Pmax) and maximum depth (Dmax) decrease. The study is published in the Journal of Biomedical Sciences, ISSN 2254-609X, Vol.8 No.3:16.

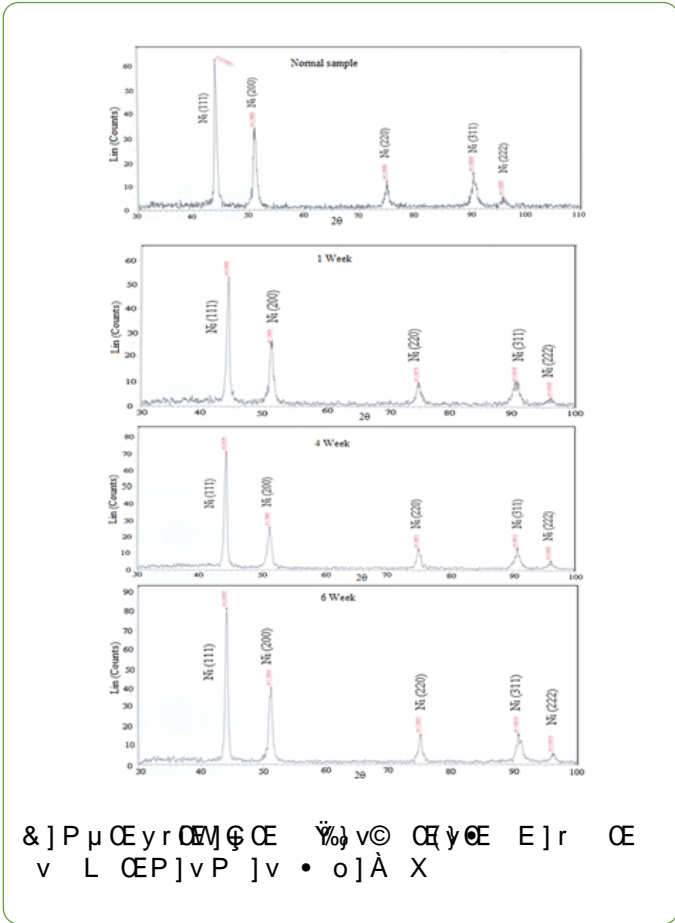


Figure 1: XRD patterns of the material at different aging times.

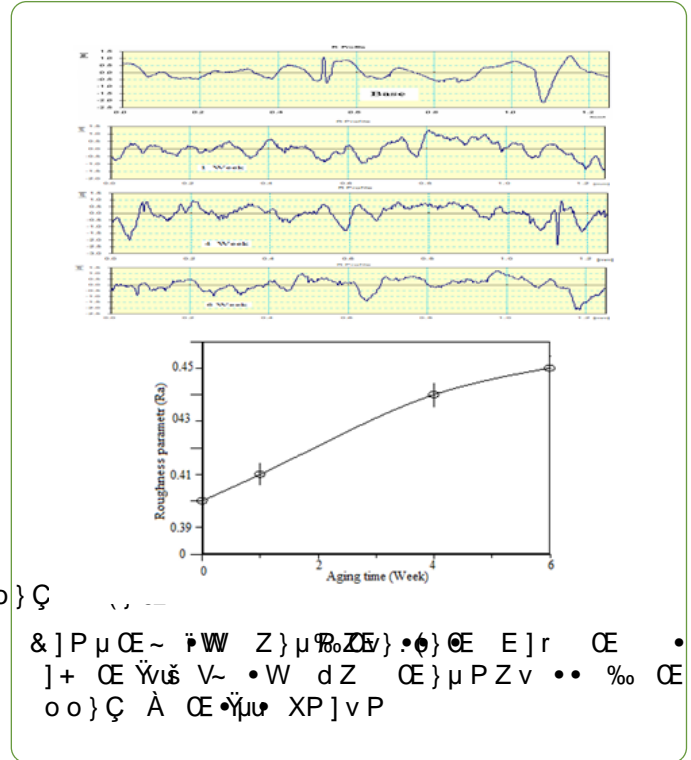


Figure 2: Surface roughness profiles and the corresponding graph showing the increase in Ra over time.

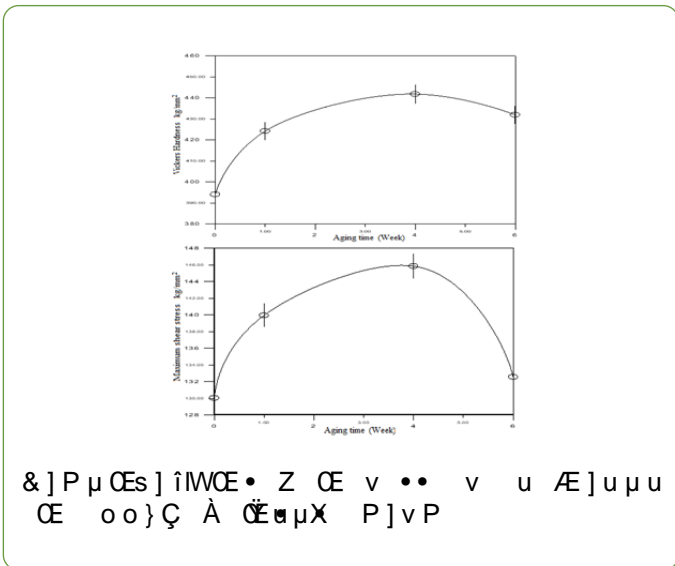
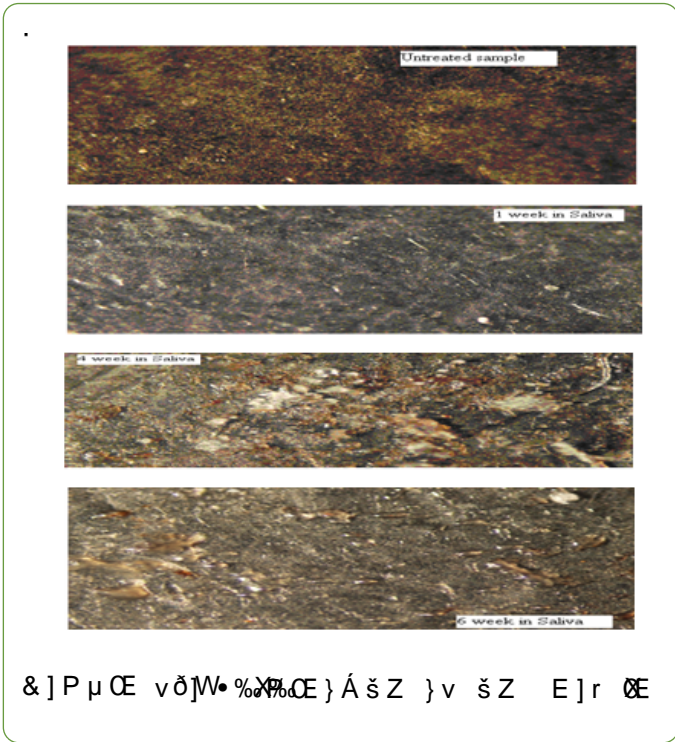


Figure 3: Maximum load (Pmax) and Maximum depth (Dmax) versus aging time. Both parameters show a decrease over time.

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Figure 4: Table showing the relationship between aging time and surface roughness parameter (Ra). The Ra values increase with aging time.

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