

STRUCTURE AND MECHANICAL PROPERTIES OF THE POLYMER BASE OF MEDICAL SPONGES WITH THE ADDITION OF METHYLURACIL



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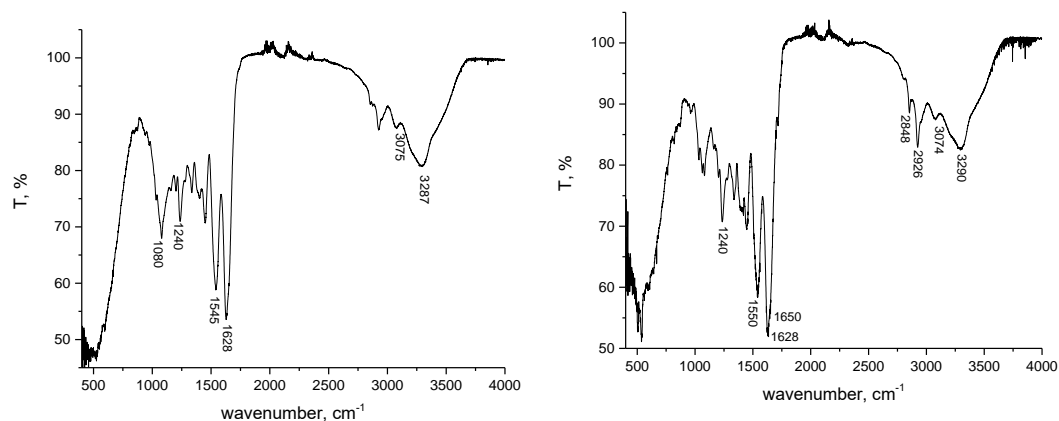


Fig. 1. IR absorption spectrum of the polymer base prepared from a 3% gelatin solution: without methyluracil (MU) and with the addition of 0.4% MU

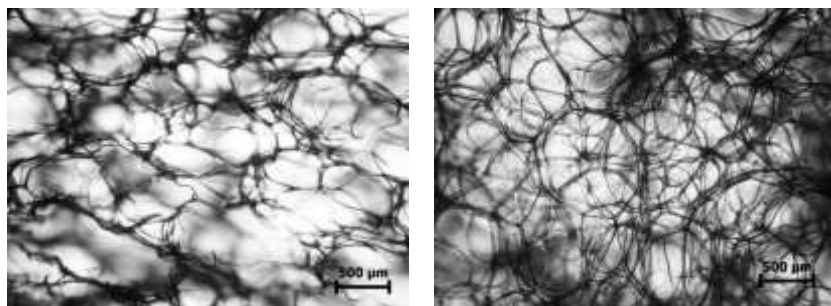


Fig. 2. Microstructure images of sponge samples without MU and with the addition of 0.4% MU

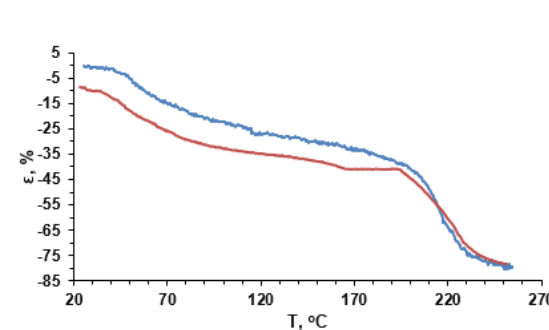


Fig. 3. Thermomechanical analysis results of samples without MU (blue line) and with the addition of 0.4% MU (red line)

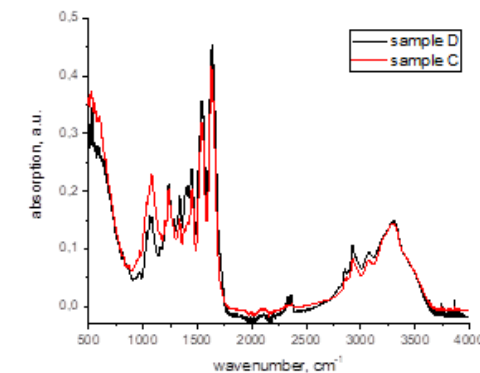


Fig. 4. FTIR spectra of sample C – the sponge base (without MU) and sample D – the sponge containing 0.08% MU

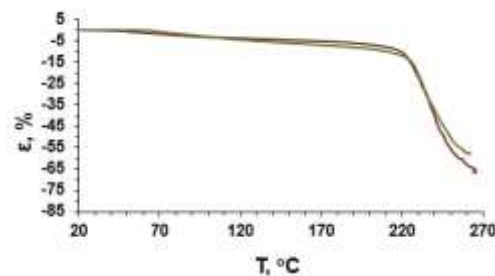


Fig. 5. Thermomechanical analysis results of samples C (brown curve) and D (gray curve)

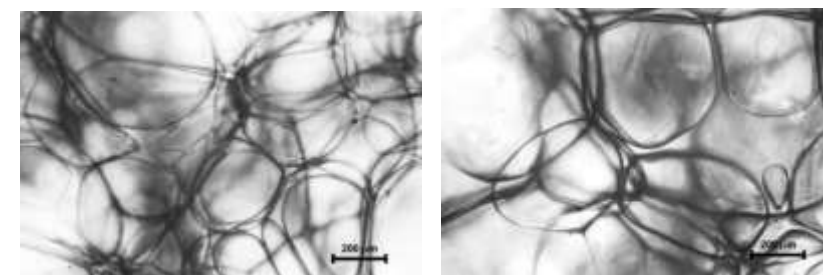


Fig. 6. Microstructure images of sponge samples C (without MU) and D (with MU).

Main conclusion: methyluracil, as a wound-healing and regenerating pharmaceutical substance, is fully compatible with the polymer base of gelatin surgical sponges and can be used as a safe and effective filler.

Acknowledgment

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