COMPARATIVE CHARACTERISTICS OF LIVER MORPHOLOGICAL AND MORPHOMETRIC PARAMETERS DURING PREGNANCY IN EXPERIMENTAL ACUTE RENAL DAMAGE

Rakhmonqulova Nargiza Gafurovna
Avezov Abror Ramazonovich
Bukhara State Medical Institute named after Abu Ali Ibn Sino, Bukhara, Uzbekistan
Doctor of the Bukhara branch of the Republican Scientific Center for Emergency Medical Care, Uzbekistan

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Abstract.*Acute renal injury during pregnancy remains a critical issue leading to catastrophic obstetric complications such as preeclampsia, HELLP-syndrome, and massive obstetric hemorrhage[1;3].This study aimed to evaluate morphological and morphometric changes of the liver in pregnant white rats with experimentally induced acute renal injury, as well as to assess the therapeutic effect of Jo'yzar mineral water.*

Materials and Methods.The experiment involved 60 albino pregnant rats divided into three groups: intact control, acute renal injury (glycerol-induced), and treatment group (acute renal injury + Jo'yzar water therapy). Morphological, histological, morphometric, and biochemical analyses were conducted. Additionally, clinical observations in 52 pregnant women with acute renal and liver dysfunction were comparatively analyzed.

Results.In acute renal injury, hepatocytes showed hypertrophy, nuclear enlargement, vacuolization, sinusoidal dilatation, and decreased Kupffer cell activity.Morphometric analysis confirmed increased hepatocyte and nuclear size, as well as portal vein and arterial diameters.In Jo'yzar-treated groups, hepatocyte morphology and morphometric parameters were significantly closer to control values, demonstrating hepatoprotective and corrective effects[2].Clinical observations confirmed comparable hepatic and renal alterations in pregnant women with renal dysfunction.

Conclusion.Experimental and clinical findings demonstrated that acute renal injury in pregnancy causes significant morphological and morphometric liver alterations. Preventive use of Jo'yzar mineral water ameliorated these changes, indicating its potential therapeutic role. The results provide scientific

and practical importance for early diagnosis, prognosis, and treatment strategies in obstetric nephrology and hepatology.

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