

## **Application of MSCs to facilitate restoration of damaged endometrium in a murine model of Asherman's Syndrome (Endometrium: Source and Target of MSCs for Cell Therapy)**

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Asherman's Syndrome (AS) is represented by intrauterine adhesions or fibrosis resulting from variable scarring inside the endometrium. There is no clear consensus about management and treatment to patients who suffer from infertility due to severe AS. Perivascular stem cells (PVSCs) are recently proposed as the origin of all mesenchymal stem cells. PVSCs from human umbilical cords (HUCs) are known to be one of the most effective cells to respond rapidly in the lesion. In this talk, histologic and molecular features of an established murine model of AS will be demonstrated. Therapeutic potentials of PVSCs for impaired tissues with fibrotic lesions such as endometrium of AS will be presented by the results of several cell therapy experiments. Collectively, we conclude that PVSCs transplantation gives us a promising option to facilitate restoration processes of impaired endometrium and improve poor pregnancy outcomes in the uterus with AS.