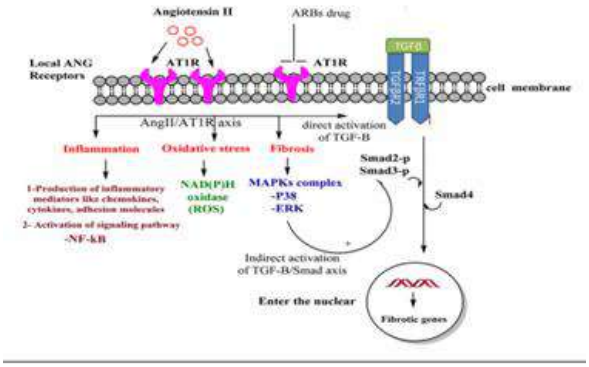
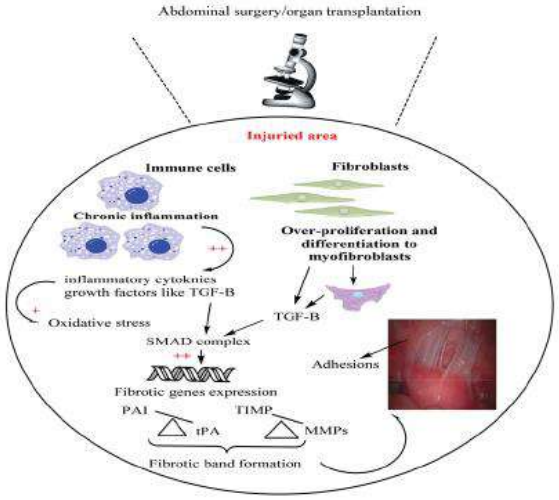
The Potential Association between the Risk of Post-Surgical Adhesion and the Activated Local Angiotensin II Type 1 Receptors: Need for Novel Treatment Strategies


**Abstract**

**Background:** Post-surgical adhesion bands (PSABs) are a common complication after abdominal or pelvic surgeries for different reasons like cancer treatment. Despite improvements in surgical techniques and the administration of drugs or the use of physical barriers, there has only been limited improvement in the frequency of postoperative adhesions. Complications of PSAB are pain, infertility, intestinal obstruction, and increased mortality. The most important molecular mechanisms for the development of PSAB are inflammatory response, oxidative stress, and overexpression of pro-fibrotic molecules such as transforming growth factor β. However, questions remain about the pathogenesis of this problem, for example, the causes for individual differences or why certain tissue sites are more prone to post-surgical adhesions. **Summary:** Addressing the pathological causes of PSAB, the potential role of local angiotensin II/angiotensin II type 1 receptors (AngII/AT1R), may help to prevent this problem.

**Key Message**: The objective of this article was to explore the role of the AngII/AT1R axis potential to induce PSAB and the therapeutic potential of angiotensin receptor blockers in the prevention and treatment of PSAB.


**Recent Publications (minimum 5)**


1-The potential association between metabolic syndrome and risk of post-surgical adhesion 2020, oi.org/10.1080/13813455.2020.1856882

2-The association between visceral adiposity with systemic inflammation, oxidative stress, and risk of post-surgical adhesion 2020, DOI: 10.1080/13813455.2020.1733617

3-Hyperglycaemia and the risk of post-surgical adhesion, 2020, DOI: 10.1080/13813455.2020.1776330

Biography



My name is Mohammad-Hassan Arjmand. I received my Master's degree in biochemistry from Mashhad University, in 2014 and my PhD in clinical biochemistry from the Mashhad University of Medical Sciences in 2019. My research interest is about Post-surgical adhesion prevention and evaluation different biological mechanisms in formation of fibrotic bands after abdominal or pelvic surgeries. Since 2019 I have focused and published several scientific articles about this topic and I'd like to continue my research about this. Now I work as a Research Scientist in Shahrekord University of Medical Sciences, Iran.