

Opinion Article

Hypothesis: Exogenous Estrogen Content in Some Types of COVID.19 Vaccines and its Fatal Complications to Renal Patients

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Article History

Received: 18.04.2021

Accepted: 02.06.2021

Published: 09.06.2021

Abstract: Many people fear from COVID.19 vaccines, due to rapid production of it, that made them doubt about the value of its clinical trials. Individuals with chronic diseases, particularly renal patients, whom are not able to excrete exogenous estradiol in level, and high level of estradiol may activate coagulation system presence of high level of proinflammatory cytokines interleukin-6, which cause tissue injury, activation of thrombin and aggregation of platelets, and presence of factor XI in some types of COVID.19 Vaccine may lead to great risk of thrombosis, that may lead to deadly complications, certainly among women.

Keywords: Exogenous estrogen, COVID.19 vaccine, renal diseases.

INTRODUCTION

COVID.19 pandemic remains the most hot issue worldwide, from its emergence in late of 2019, up to date, the strangeness of clinical features of the virus and quick evolution of it, make the task of scientist and researcher very hard, even after development of vaccine, side effects and undesired consequences of artificial immunization, made many people fear from vaccine more than virus itself, and they prefer herds immunity than vaccination

Chronic kidney disease (CKD) in women is often accompanied by menstrual and fertility disorders as result of kidney-mediated endocrine disturbances.

Estradiol, estrone and estrone sulfate are the primary circulating estrogens in women, while measure of estrone relative to estradiol rises with menopause. Though slight estradiol and estrone excreted in the urine, presence of kidney disease changes the pharmacokinetics of both endogenous and exogenous forms of estradiol. Free and total estradiol plasma concentrations are greater in women with ESKD both at baseline and after an oral estradiol dose, but no change occurs in estrone concentrations. Neither estradiol nor estrone removed by dialysis, suggesting that women with CKD should receive a 50% reduced oral estradiol dose [1].



Fig-1: Hemodialysis machine

The most common etiology is nephrotic syndrome as it results in a hypercoagulable state, may occur due to Pregnancy or estrogen therapy [2].

High levels of Estradiol in those people lead to increase of interleukin-6, tissue injury, stimulation of thrombin, aggregation of platelets and formation of clot, and increase the risk of thromboembolism among them. Hypothesis suggested that; exogenous estrogen (Estradiol) content [3] and Presence of inactivated factor XI in some type of COV-2 Vaccines [4], may lead to fatal complications.

Synthesis of COVID.19 vaccines within short time, increase the doubt of many people about the clinical trials of it, long-term consequences of this type of vaccine is not known, furthermore the constituents of vaccines are not well-known to the healthcare workers and their customers.

CONCLUSION

Content of some types of vaccines, which induce hypercoagulability, such as exogenous estrogen and Factor XI, and failure to remove it by hemodialysis, may lead to severe complication even death. More precautions required when health care professional deal with those group of people, with more concern on women, during COVID.19 vaccination programs.

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Citation: Mosab Nouraldein Mohammed Hamad. (2021). Hypothesis: Exogenous Estrogen Content in Some Types of COVID.19 Vaccines and its Fatal Complications to Renal Patients. *South Asian Res J Bio Appl Biosci*, 3(3), 36-37.