LETTER TO THE EDITOR

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To
Editor-in-Chief
Journal of Bangladesh College of Physicians and Surgeons.

Sir,

At first I would like to thank the editor for publishing the review on a common benign Gynaecological disorder endometriosis. I have gone through the article and found the content of review is very nice & informative. Although I would like to share some of my observations and comments.

Endometriosis is a disease of hypothesis as the definite cause remain unknown. Here the author mention the different theory of genesis including recent views, such as moleculer explanation of Sampsons theory, its familial inheritance and some diffect in immune response which is evidenced by altered T-cell mediated cytotoxicity, natural killer cell activity also B-cell dysfunction. In addition to these explanations several studies suggest that oxidative stress is a component of the inflammatory reaction associated with endometriosis[1]. Recent studies have investigated the role of the immune system and oxidative stress in the development of endometriosis as well as the identification of biomarkers for a non invasive diagnosis of the disease[2]. At endometriotic sites, the inflammatory cells including esonophil, neutrophil and macrophages generate reactive oxygen species that might contribute to the development of oxidative stress in the peritoneal cavity. This oxidative stress altered on or augments immune response in affected sites which thought to be the main probable pathogenesis of endometriosis.

An interesting facts of endometrioses is that the severity of the diseases does not be always correlate with degree of symptoms. Asymptomatic endometriosis can incidentally diagnosed by laparotomy or laparoscopy for other disease or during workup for infertility. Pain & infertility are the common symptoms described by authors preciously. One of the most common factors for reduced fecundity in women with endometriosis is impaired oocyte development and poor oocyte quality. Oocyte quality depends on proper cytoplasmic & nuclear maturation[3] & the latter requiring the presence of normal cell spindle that guide chromosome segregation during meiosis[4,5]. The cell spindle of the oocyte is extremely sensitive to several factors including oxidative stress[6], which might be involved in the etiopathogensis of infertility related to endometriosis.

I read the review article with very much interest specially on various treatment options including newer medical treatment modalities - aromatase inhibitors, selective estrogen receptor modulators (SERMs), progesterone receptors modulators (SPRMs) etc. Definitely combined medical & surgical approach reduce the pain related symptoms mostly & improve the patients quality of life.

Treatment options of infertility related with endometriosis are described briefly & nicely in this article. Though combined medical & surgical therapy improves the pain related symptoms but fertility is not inhanced satisfactorily. For better result recommended treatment options include superovulation, IUI as well as assisted reproductive technique. In addition to these, as there is strong relation of oxidative stress with formation of free radicle such as reactive oxygen species and reactive nitrogen species, with fertility problem[7], various antioxidants (vit-C, E, selenium , zinc, Taurine, glutathion, B- carotine etc) can be supplemented. Of course for these it requires more study.

Finally I thank the authors for writing the review article on time demanding common problem in gynaecology.

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Author Reply

To
Editor –in –Chief
Journal of Bangladesh College of Physicians and Surgeons.

Sir

It is a pleasure to me that Dr. Noor Sayeda has gone through my article thoroughly. Her comments in the content of the review article is quite informative. She added some recent information like oxidative stress in the genesis of endometriosis. There are many other factors thought to influence endometriosis like life style modifications, exercise, role of diets containing anti-oxidants which could not be elaborated in the article due to lack of space. However I gladly accept the additional information she has provided and thanks to her.

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