

Abstract

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The role of antioxidant therapy in the treatment of male infertility.

Agarwal A, Sekhon LH.

Center for Reproductive Medicine, Glickman Urological & Kidney Institute and Ob/Gyn & Women's Health Institute, Cleveland Clinic, Cleveland, Ohio, USA.

OBJECTIVE: Oxidative stress contributes to defective spermatogenesis leading to male factor infertility. The aim of this study was to review the current literature on the effects of various antioxidants to improve fertilisation and pregnancy rates.

METHODS: The sources of literature were Pubmed and the Cochrane data base.

FINDINGS: Reviewing the current literature revealed that Carnitines and vitamin C and E have been clearly shown to be effective by many well-conducted studies and may be considered as a first line treatment. The efficacy of antioxidants, such as glutathione, selenium and coenzyme Q10 has been demonstrated by few, but well-performed studies, and may be considered second line treatment.

CONCLUSIONS: There is, however, a need for further investigation with randomised controlled studies to confirm the efficacy and safety of antioxidant supplementation in the medical treatment of idiopathic male infertility as well as the need to determine the ideal dose of each compound to improve semen parameters, fertilisation rates and pregnancy outcomes.

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