

Polydeoxyribonucleotide Treatment in Genital Lichen Sclerosus in Males

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Key Words

Polydeoxyribonucleotide · Lichen sclerosus · Balanitis xerotica obliterans

Abstract

It has been reported that treatment with polydeoxyribonucleotide (PDRN) in males affected by lichen sclerosus significantly improves the overall conditions of treated patients. It confirms that PDRN has a potent cytoprotective action as in other pathological conditions. We believe that multicentric randomized clinical trials are necessary for testing the benefits of this promising agent.

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We read and appreciated very much the article written by Zucchi et al. 'Genital Lichen Sclerosus in Male Patients: A New

Treatment with Polydeoxyribonucleotide' [1].

The article focuses on the role and effects of polydeoxyribonucleotide (PDRN) in the treatment of a genital lichen sclerosus in males and the authors noted a significant improvement of overall conditions of treated patients [1]. In previous studies, we studied the action of PDRN in model of testicular ischemia/reperfusion [2] injury and varicocele as well and we documented that PDRN has potent cytoprotective effects by inducing VEGF and modulating the apoptotic mechanism [3, 4]. Furthermore, PDRN activated neoangiogenesis, which ameliorates the blood supply and oxygenation [5]. We believe that PDRN can also act in a similar fashion in human lichen sclerosus.

In our experience, the incidence of lichen sclerosus in paediatric patients who

underwent circumcision for secondary phimosis is about 45% and, at the moment, we have been treating them with steroids. However, steroids treatment can cause side effects, even leading to serious outcome, and sometimes it is contraindicated (i.e. diabetes). On the basis of the above research, we believe that treatment of lichen sclerosus with PDRN can be an intriguing alternative to steroids. A limitation, mostly in paediatric age, might be the application of intra-dermal or submucosal injection of PDRN and, as is well known that children do not tolerate needles well. We are considering the possibility that PDRN cream (Turnover[®], Mastelli S.r.l., Sanremo, Italy) could be used with the same results. We believe that multicentric randomized clinical trials are necessary for testing the benefits of this promising agent.

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