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SEXUAL DYSFUNCTION

Beyond the curve—CCH shows promise for Peyronie's

Collagenase clostridium histolyticum (CCH) reduces curvature and symptom bother in subgroups of men with Peyronie's disease, according to a *post hoc* subgroup analysis of the IMPRESS I and II data.

Peyronie's disease is characterized by excessive disposition of collagen, forming a plaque within the tunica albuginea. Tunical lengthening is, therefore, restricted, resulting in penile curvature, discomfort and erectile dysfunction (ED), as well as psychological bother. CCH is a combination of two microbial collagenases, with a synergistic effect on collagen breakdown, which has been FDA approved for the treatment of selected men with Peyronie's disease.

Two large randomized–controlled trials (IMPRESS I and II) showed that intralesional injections of CCH are safe and effective, but the effect of patient characteristics on the success of CCH treatment remained unstudied. In this analysis of IMPRESS I and II data, patient subgroups were defined by four variables: baseline penile curvature, duration of disease, degree of calcification and baseline severity of ED (classified by International Index of Erectile Function [IIEF] score). Patients received two intralesional injections of 0.58 mg CCH or placebo, after which they underwent plaque remodelling (gradual stretching of the flaccid penis in the opposite direction to the curvature) and self-modelling for 6 weeks, followed by a second treatment cycle, up to a maximum of four.

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Improvements in curvature were observed after CCH treatment in both groups of men defined according to baseline severity, although the effect was greater in those with baseline curvature <60°. When stratified by duration of disease, those with a longer duration saw the greater benefit, with no significant change in those who had Peyronie's disease for only 1–2 years. Effects on symptom bother in these men were only significant in those who had had the disorder for >4 years. Significant improvements in both curvature and bother were only observed in the men who had no calcification, and stratification according to erectile function showed improvements in curvature in those with IIEF ≥17, but not those with less severe ED. Taken together, the data support the findings of the IMPRESS trials, but emphasize the need for future studies to be appropriately powered to examine effects in subgroups of patients, in order to determine how patient variables can guide future treatment decisions.

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Original article Lipshultz, L. I. *et al.* Clinical efficacy of collagenase clostridium histolyticum in the treatment of Peyronie's disease by subgroups: results from two large, double-blind, randomized, placebo-controlled, phase 3 studies. *BJU Int.* doi:10.1111/bju.13096