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Treatment Related Outcomes for Patients with Atypical Peyronie's Disease using Xiaflex Injections.

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Introduction: Peyronie's disease (PD) is an acquired condition typically characterized by plaque formation and dorsal/lateral penile curvature. Atypical PD is a term used to describe less common PD presentations such as ventral curvature, multiplanar curvature, penile indentation and hourglass deformity.

Objective: We sought to assess the outcomes of patients presenting atypical PD presenting to a men's health clinic and treated with Xiaflex.

Methods: We conducted a retrospective review of charts of men who presented to one clinic with atypical PD between October 2016 and June 2019. Patients were included if they were considered to be in the stable phase of the disease and had completed a penile duplex Doppler ultrasound (PDDU) prior to any intervention. Gathered data included patient demographics and treatment details, outcomes and complications. Patients presenting with indentation or hourglass deformity were asked to answer the symptom bother domain of the Peyronie's Disease Questionnaire (PDQ) and were scored on a scale of 0-16 before and after treatment. Offered treatments included intralesional injection of Xiaflex, tunical plication, partial excision and grafting and insertion of inflatable penile prosthesis. Included were only men who received Xiaflex injections as treatment.

Results: During this period, 93 men with stable PD underwent PDDU, of which 61 (65.6%) were found to have atypical PD. Overall, 37/61 (60.7%) opted for treatment of which 21 (58.3%) chose Xiaflex of which 5, 6, 17 and 5 had ventral curvature, multiplanar curvature, indentations and hourglass deformity respectively. The mean number of Xiaflex injections used was 8.4 ± 3.3 . Results showed that patients who underwent Xiaflex injections had a mean improvement in curvature of 17.0 ± 8.2 degrees ($38.4\%\pm13.1\%$). Stratified by each category, improvements reported were 16.9 ± 6.9 degrees ($48.1\%\pm9.5\%$), 15.8 ± 6.1 degrees ($46.0\%\pm9.6\%$), 17.5 ± 8.8 degrees ($37.5\%\pm13.9\%$), 18.5 ± 11.1 degrees ($35.7\%\pm15.4\%$) in ventral curvature, multiplanar curvature, indentations and hourglass deformity respectively. Mean change in PDQ bother score was -6.8 ± 2.8 . Overall, 55.5% reported subjective resolution of their indentation and 75.0% reported significant improvement in hourglass deformity. 80.0% of responders said they would pursue this treatment again. There was 1 penile fracture which required surgical repair.

Conclusions: Patients with atypical PD represent a significant proportion of men with PD and Xiaflex demonstrates favorable improvements in penile curvature and bother score in such cases Outcomes with Xiaflex in patients with atypical PD are comparable to those reported in the IMPRESS trials.

	Ventral (N=20)	Multiplanar (N=18)	Indentation (N=40)	Hourglass (N=12)	
Number treated with Xiaflex	N=5	N=6	N=17	N=5	Overall improvement
Degrees improved	-16.9±6.9	-15.8±6.1	-17.5±8.8	-18.5±11.1	-17.0±8.2
Percentage improved	48.1±9.5%	46.0±9.6%	37.5±13.9%	35.7±15.4%	38.4±13.1%
Subjective improvement in Indentation and Hourglass			55.5%	75.0%	