

Guimaraes T., Falcão G. , Muresan C. , Guerra J. , Morales J. , Campos Pinheiro L. , Baltazar P.

Centro Hospitalar Universitário Lisboa Central, Dept. of Urology, Lisbon, Portugal

Introduction & Objectives: Peyronie's disease is a benign and acquired pathology of unknown etiology. Its prevalence ranges from 0.4 to 9% and is more prevalent in patients with erectile dysfunction and Diabetes. The peak incidence is between 55-60 years. This pathology is characterized by the development of a fibrous plaque at the level of the inner layer of the tunica albuginea and the corpus cavernosum and can result in erect penile deformation, localized pain and erectile dysfunction. Our objective was to evaluate the distribution of the risk factors associated with Peyronie's disease in patients submitted to their surgical correction at Centro Hospitalar Universitário Lisboa Central (CHULC) and to evaluate the cumulative impact of risk factors on the severity of curvature and erectile dysfunction.

Materials & Methods: We retrospectively analysed the clinical charts of all patients who underwent surgery to correct Peyronie's disease between January 2010 and December 2018. The parameters known as Peyronie's disease, such as the presence of Arterial Hypertension, Dyslipidemia, Obesity, Smoking, Alcoholism, History of Trauma or recent urological intervention, Dupuytren's disease among others. Patients were stratified according to the modified Kelami Classification and International Index of Erectile Function (IIFE-5) and the degree of curvature and dysfunction erectile were related to the number of cumulative risk factors associated.

Results: A total of 108 patients were evaluated, of whom 90 were considered eligible for the study. The mean age at diagnosis was 68.9 years. The main factors (45.6%), dyslipidemia (31%), smoking (27%) and diabetes mellitus (19%) were associated with Peyronie's disease. THE penile deformity was the most common presentation, with pain associated with erection in 67% of the cases. The mean angle of curvature was 55 ° (between 30-110°). Dorsal penile curvature was observed in 53% of cases, left lateral in 35%, right lateral in 6% and ventral in 4%. Complex deformities were observed in approximately 2%. According to the modified Kelami Classification, approximately 41.1% of the patients had degree of (> 30°), moderate 26.7%, and 32.2% of the patients presented severe curvature. Of the patients with severe curvature degree (n:29), about of 87.5% (n:24) had > 3 accumulated risk factors for Peyronie's disease and all of them presented with erectile dysfunction at diagnosis (p>0,001).

Conclusions: Risk factors such as Hypertension, Dyslipidemia, Smoking and Diabetes Mellitus were prevalent in patients diagnosed with Peyronie's disease. The degree and severity of the curvature were related to the number of cumulative risk factors and to the impact of the disease on quality of life in sexual function.