

**Abstract Number: 18217**

## **Radiographic evaluation of results of percutaneous surgery of Hallux Valgus**

Jorge Eduardo de Schoucair Jambeiro<sup>1</sup>, Antero Tavares Cordeiro Neto<sup>1</sup>, Fernando Delmonte Moreira<sup>1</sup>, José Augusto de Oliveira<sup>1</sup>, Marcela Arimatea Cabral<sup>2</sup>

1. Hospital Santa Izabel - Santa Casa da Bahia, Salvador BA, Brazil.

2. Escola Bahiana de Medicina e Saúde Pública, Salvador BA, Brazil.

### **ABSTRACT**

**Introduction:** There is no consensus regarding the best surgical treatment for Hallux Valgus (HV). The use of percutaneous procedures for HV has been increasingly explored. The present study aims to evaluate and compare the radiographic results of percutaneous surgeries for HV treatment performed at our institution.

**Methods:** A retrospective study was performed on radiographs and medical records of patients undergoing percutaneous surgery for HV treatment from August 2017 to August 2018. Using pre and postoperative radiographs, the Hallux valgus angle (HVA), intermetatarsal angle (IMA), and bone sesamoid deviation measurement and classification were performed according to the AOFAS criteria for angular measurements.

**Results:** We evaluated the radiographs of 19 patients, representing a total of 25 feet, with a minimum segment time of four months, 84.2% females, and a mean age of 58 years. In 13 feet, there was an association of the Chevron and Akin techniques and in 12 of the Reverdin-Isham and Akin techniques. On average, the preoperative IMA was 13.4°, and in the postoperative period, 7.2° HVA had a mean of 26.3° in the preoperative period and in the postoperative period an average value of 11,2°. We observed improvement of the dislocation of the sesamoids in all cases by postoperative radiography. We did not find any serious complications.

**Discussion:** There was a decrease in the postoperative measurements in all evaluated cases, with a mean of 15° in the HVA and 6,2° in the IMA. Chevron osteotomy associated with AKIN obtained a higher degree of correction of the IMA as predicted. The HVA using both techniques provided good correction without significant differences, which could be explained by the association of the Akin osteotomy in the two evaluated techniques.

**Conclusion:** Percutaneous surgeries with Chevron plus Akin and Riverdin-Isham plus Akin techniques performed at our institution proved to be efficient for HV correction, with a reduction of postoperative HVA and IMA.

**Keywords:** Hallux valgus; Percutaneous surgery; Minimally invasive surgical procedures.

