Materials and Methods

All patients undergoing CMP for onychocryptosis at the Istituto Podologico Italiano, Rome, Italy, in 2008–2017 were included in the study (*n* = 643).

We used iodopovidone 10% for antisepsis before and after surgery, and lidocaine 10 mg without epinephrine for local anaesthesia. One ampoule containing 0.15–0.20 ml of 89% phenol was applied onto the matrix using a cotton-tipped applicator and was left reacting for 4 min continuously. We excluded 21 debilitated patients from this study, as their application time was reduced to 3 min to avoid the potential risk of ulceration or ischaemia (they were either very old or with severe co-morbidity, especially cardiovascular).

Postoperative follow-up visits were set at 24 h, 7, 14, 21, and 28 days, 6 months, and 1 year after surgery. The treatment outcome was considered successful when there was no recurrence at any follow-up visit, with no maximum limit.

We recorded patients' age, gender, toe shape, comorbidities, and disease localization at baseline. During the follow-up visits we recorded information about postoperative complications (infection and bleeding) and pain (defined as the use of painkillers). All procedures were carried out by the same practitioner to ensure uniformity.

Statistical Analysis

We cleaned the data before the statistical analysis and each variable was inspected in isolation for missing values, outliers, and abnormal distributions.

We calculated the risk of recurrence and its 95% confidence intervals using exact binomial distribution. We then used adjusted logistic regression to model the chances of recurrence against several potential risk factors: age, gender, presence of comorbidities, toe shape, whether both feet were affected or not, and whether the disease affected the lateral side of the nail (facing the second finger) or the medial side (facing the shoe). We did not consider infection, bleeding, and excessive pain, as they were present in less than 0.5% of the sample. Patients with a recurrence were all males and we therefore excluded that variable from the adjusted model.

As for sensitivity analyses, we adjusted for comorbidities (binary) versus comorbidities (categorical) versus cardiovascular disease (binary). We also adjusted for number of lesions (linear) versus whether both feet were affected or not (binary). We excluded people with cardiovascular disease from the models, as they accounted for just 6% of the sample (39/622) and they had a much higher risk of recurrence. The estimates did not relevantly change following the sensitivity analyses.