Cleft lip and palate (CLP) defects are considered to be the most common facial birth defect. Despite the relevance of this global health issue, the knowledge level on CLP is alarmingly low. Therefore, it was our aim to construct a realistic haptic anatomic CLP model that can be used for 3-dimensional visualizing CLP and practicing the first steps of CLP treatment. Models of newborns with CLP are not commercially available so far. Therefore, construction was based on a purchased baby doll of a healthy newborn. After fabrication of the model, we used it in a hands-on course for medical students. A total of 138 students were asked to perform practical tasks such as taking intraoral impressions and fixating drinking and nasoalveolar plates on the CLP model. To evaluate the didactic benefit, preteaching and postteaching multiple-choice tests were performed. A suitable patient’s plaster model from our archive served as a template for shaping a unilateral CLP in the face of a baby doll by means of a scalpel and a handheld rotating milling machine. Hard and soft palate were milled out and replaced by a hard stone cast of a patient with cleft palate. When analyzing the preteaching and postteaching scores of the students’ multiple-choice tests, an improvement was achieved in 69.6%, which proved to be statistically significant (P< 0.001). In our opinion, the CLP model is a useful teaching tool with a high potential to improve the level of knowledge and practical
expertise in the field of CLP.