Ductoscopic detection of intraductal lesions in cases of pathologic nipple discharge in comparison with standard diagnostics: the German multicenter study.

Abstract:
According to the literature, ductoscopy is gaining increasing importance in the diagnosis of intraductal anomalies in cases of pathologic nipple discharge. In a multicenter study, the impact of this method was assessed in comparison with that of standard diagnostics. Between 09/2006 and 05/2009, a total of 214 patients from 7 German breast centers were included. All patients underwent elective ductoscopy and subsequent ductal excision because of pathologic nipple discharge. Ductoscopy was compared with the following standard diagnostics: breast sonography, mammography, magnetic resonance imaging (MRI), galactography, cytologic nipple swab, and ductal lavage cytology. The histological and imaging results were compared and contrasted to the results obtained from the nipple swab and cytologic assessment. Sonography had the highest (82.9%) sensitivity, followed by MRI (82.5%), galactography (81.3%), ductoscopy (71.2%), lavage cytology (57.8%), mammography (57.1%), and nipple swab (22.8%). Nipple swabs had the highest (85.5%) specificity, followed by lavage cytology (85.2%), ductoscopy (49.4%), galactography (44.4%).
mammography (33.3%), sonography (17.9%), and MRI (11.8%). Currently, ductoscopy provides a direct intraoperative visualization of intraductal lesions. Sensitivity and specificity are similar to those of standard diagnostics. The technique supports selective duct excision, in contrast to the unselective technique according to Urban. Therefore, ductoscopy extends the interventional/diagnostic armamentarium.