

Effectiveness of sampling methods employed for *Acanthamoeba keratitis* diagnosis by culture

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© 2018, Springer Nature B.V. Purpose: This retrospective, observational study was designed to evaluate the effectiveness of the sampling methods commonly used for the collection of corneal scrapes for the diagnosis of *Acanthamoeba keratitis* (AK) by culture, in terms of their ability to provide a positive result. Methods: A total of 553 samples from 380 patients with suspected AK received at the Parasitology Section of the Public Health Institute of Chile, between January 2005 and December 2015, were evaluated. A logistic regression model was used to determine the correlation between the culture outcome (positive or negative) and the method for sample collection. The year of sample collection was also included in the analysis as a confounding variable. Results: Three hundred and sixty-five samples (27%) from 122 patients (32.1%) were positive by culture. The distribution of sample types was as follows: 142 corneal scrapes collected using a modified bezel needle (a novel method developed