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## Purpose: quantify tear concentration of hyaluronic acid in normal subjects.

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Method: Tear samples were obtained from 15 normal subjects without ocular or systemic diseases. To collect the tear, Schirmer strips were placed in the temporal side of each eye under the eyelid, during 5 minutes, without any use of topical anesthetics, and total volume were quantified at strip scale (in millimeters). The strips were dried at room temperature and stored at –200 C until analysis. At the time of analysis, hyaluronic acid and total proteins were eluted from strips with distilled water and assayed with fluorometric and colorimetric technique, respectively.

Results: The mean of total of protein was  $144.9 \pm 78.1$  mg (ranging from 37.5-342.6 mg). The mean of hyaluronic acid present in the tear was  $19.9 \pm 12.8$  ng/mg protein (ranging from 3.2-45.0 ng/mg protein).

Conclusion: It is possible extract macromocules such as proteins and hyaluronic acid adsorbed on Schirmer's strips, and measure their contents by conventional laboratories assays. This new approach could be usefull to investigative studies involving ocular and systemic diseases.