

COMBATING THE NEED OF CORNEAL TRANSPLANTATION SURGERY FOR KERATOCONUS PATIENTS

Srujana Sahebjada

Centre for Eye Research Australia, Australia

Keratoconus is a devastating and potentially blinding eye disease affecting 1 in 375 people. It is typically diagnosed during early teenage years and has a significant lifetime burden on an individual. Our research team has conducted a pilot study wherein we recruited 400 subjects from public and private clinics in Australia and the preliminary results far exceeded our expectations. However, it is not that easy to detect early or sub clinical keratoconus when corneal cross linking can be performed to slow the progression of the condition. Also, little is known about the underlying aetiology of keratoconus. We are establishing the Keratoconus International Consortium (KIC), incorporating research centres across Australia, Asia, USA and Europe with the aim of: Early detection of keratoconus by identifying novel determinants allowing earlier intervention to prevent the need for corneal transplantation; Develop genetic and laboratory investigations to supplement clinical findings; and

screening children of keratoconus patients for early detection and management of the disease. This global collaborative initiative is a game-changer with already on board 15 national and international corneal specialists, willing to collect and share data and thus contribute to expanding our knowledge about keratoconus. to set up a centralised data collection instrument for improved clinical determination of disease aetiology as well as collect tissue from patients for genetic analysis. The project will have a profound impact on the early detection and management of the disease. This will translate to reduction in the rate of corneal transplantation—this is an area of great need, as the Australian Corneal Graft Registry recently estimated that keratoconus patients typically require up to five corneal transplants during their life.

Srujana.sahebjada@unimelb.edu.au