



MEETING ABSTRACT

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# Prevalence of cataract in adult Down's syndrome patients

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## Background

Age-related cataract is the major cause of blindness in humans throughout the world. The majority of previous studies of cataract in Down's syndrome have reported a prevalence that is higher for a given age range than in the general population. The aim was to study the prevalence of cataract in a well-defined population of adults with Down's syndrome.

## Materials and methods

An in-patient population of 68 adults (35 males and 33 females) with Down's syndrome, aged between 28.9 and 83.3 years, underwent ophthalmological examination for the presence of cataracts.

## Results

Overall, the prevalence of cataract was 16.2%, with no significant difference between males (17.1%) and females (15.2%). In those aged between 45 and 64 years, the prevalence was 16.7%, rising in those aged between 65 and 75 years to 28.6%.

## Conclusions

Compared with the general population, the prevalence of cataract in Down's syndrome was raised in those aged 45 to 64, but not in those aged 65 to 75 years; the latter might be a function of the relatively small number of patients in this age group. The increased prevalence of cataract found in those in the 45- to 64-year-old age group may be the result of increased levels of CuZn-SOD, in turn resulting from the location of the associated five exons of SOD1 on chromosome 21. These elevated levels of superoxide dismutase may give rise to increased levels of reactive species, including hydrogen

peroxide and hydroxyl radicals, which may increase the risk of cataractogenesis.

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