To investigate the change in visual acuity in eyes without clinical signs of any disease from 70 to 88 years. An...to specifically analyze the rate of change after 70 years of age where most previous studies only present scarce data.

Assumptions that the deterioration of acuity follows the relationship between spatial resolution thresholds and effective midget ganglion cell separations versus eccentricity (Popovic, 2003) the percentage loss of visual acuity in different age intervals can be calculated. The demonstrated deterioration after 70 years may be due to increased "physiological" aging of the visual system or the onset of subclinical changes.

The results indicate that the decline of VA is accelerated after 70 years in eyes without clinical signs of disease (Fig. 2). It is reasonable to assume that this increased decline is due to age-related changes within the optic pathway and cortical circuitry.

**Methods**

We used recently published population data of visual acuity (VA) in healthy eyes of subjects (n=104) from 70 to 97 years of age. Upper and lower quartiles are included to indicate the distribution of the data.

Calculation of loss of retinal ganglion cells in the elderly and old.

**Results**

The results indicate that the decline of VA is accelerated after 70 years in eyes without clinical signs of disease (Fig. 2). It is reasonable to assume that this increased decline is due to age-related changes within the optic pathway and cortical circuitry.

**Discussion**

Declining visual acuity in healthy eyes with age. Even though morphological studies have shown only limited age-related losses of cells involved in the visual processing of...our analysis shows an accelerated decline of visual acuity after 70 years of age in eyes without obvious disease.

**Conclusions**

The demonstrated deterioration after 70 years may be due to increased "physiological" aging of the visual system or the onset of subclinical changes.

The results indicate that the decline of VA is accelerated after 70 years in eyes without clinical signs of disease (Fig. 2). It is reasonable to assume that this increased decline is due to age-related changes within the optic pathway and cortical circuitry.

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**Declaration of clinical neuroscience, Göteborg, Sweden**