RELATIONSHIP BETWEEN IOP AND COAG, AND IMPLICATIONS FOR TERMINOLOGY (NTG, LTG, OH)

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There are clearly connections between the level of intraocular pressure and the risk for COAG. Similar relationships have been observed in several population-based studies, although in the Baltimore Eye Survey, this relationship was non-linear for blacks and linear for whites. Because the connection between IOP and the risk for COAG does not seem to depend on a threshold IOP level, the division of COAG into NTG/LTG and COAG based on IOP is simply a means of stratifying patients. Furthermore, the levels used in creating these categories are to some degree arbitrary. Perhaps instead of using 21 mm Hg as the “cut-off” for defining COAG and NTG or LTG, one could use the median IOP for the population (i.e., the level such that 50% of the population would be below the cut-off and 50% would be above). It is clear that using a cut point in the range of 15-17 mmHg, instead of 21 mmHg would affect not only the definition NTG/LTG and COAG but also study conclusions. For example, in the CNTG trial, subjects who were enrolled had median IOPs below 20 mmHg. Thus, these subjects have NTG/LTG if one uses the 21 mmHg cut-off but not if one requires that NTG/LTG subjects have IOPs less than the median for the population. Further research on the impact of alternative cut points for categorizing NTG/LTG and COAG is needed.

Updated: March 11, 2008 12:55 PM AS