Why do old men have big ears?

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In July 1993, 19 members of the south east Thames faculty of the Royal College of General Practitioners gathered at Bore Place, in Kent, to consider how best to encourage ordinary general practitioners to carry out research. Some members favoured highly structured research projects; others were fired by serendipity and the observations of everyday practice: Someone said, "Why do old men have big ears? Some members thought that this was obviously true—indeed some old men have very big ears—but others doubted it, and so we set out to answer the question "As you get older do your ears get bigger?"

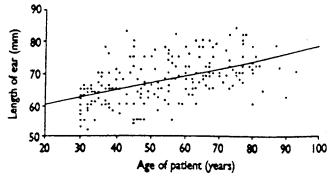
Methods and results

Four ordinary general practitioners agreed to ask patients attending for routine surgery consultations for permission to measure the size of their ears, with an explanation of the idea behind the project. The aim was to ask consecutive patients aged 30 or over, of either sex, and of any racial group. Inevitably it was sometimes not appropriate—for example, after a bereavement or important diagnosis to make what could have seemed so frivolous a request, and sometimes (such as when a surgery was running late) patients were not recruited. The length of the left external ear was measured from the top to the lowest part with a transparent ruler; the result (in millimetres), together with the patient's age, was recorded. No patients refused to participate, and all the researchers were surprised by how interested (if amused) patients were by the project. The data were then entered on to a





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Scatter plot of length of ear against age

computer and analysed with Epi-Info; the relation between length of ear and the patient's age was examined by calculating a regression equation.

In all, 206 patients were studied (mean age 53.75 (range 30-93; median age 53) years). The mean ear length was 675 mm (range 520-840 mm), and the linear regression equation was: ear length=55.9+(0.22× patient's age) (95% confidence intervals for B coefficient 0.17 to 0.27). The figure shows a scatter plot of the relation between length of ear and age.

It seems therefore that as we get older our ears get bigger (on average by 0.22 mm a year).

Comment

A literature search on Medline by the library at the Royal College of General Practitioners that looked for combinations of "ears, external," "size and growth," "males," and "aging" produced no references.

A chance observation—that older people have bigger ears—was at first controversial but has been shown to be true. For the researchers the experience of involving patients in business beyond their presenting symptoms proved to be a positive one, and it was rewarding to find a clear result. Why ears should get bigger when the rest of the body stops growing is not answered by this research. Nor did we consider whether this change in a particular part of the anatomy is a marker of something less easily measurable elsewhere or throughout the body.

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