Brief communication

Symmetrical joint involvement

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A person whose joints are affected, *e.g.* by rheumatoid arthritis, may have a variable degree of symmetrical involvement. As this has been taken as a criterion for diagnosis, the following numerical index is proposed.

Index of symmetry

$$= \frac{\text{No. of pairs both affected}}{\text{Total no. affected joints}} \times 200.$$

If all are symmetrically affected, the index is 100%: if all affected are unpaired, the index is 0%.

We tested this (in 1951) in 40 cases of rheumatoid arthritis (considering 39 paired joints altogether, lumping tarsal and subtalar together as one joint). Involvement was defined clinically as two of the following three clinical signs—soft tissue swelling, limitation, and pain on movement. The 40 cases showed, as might be expected, some increase in the degree of symmetry with the total number of joints affected, but this is not a straight-line relationship.

Looking in this way at the 4 cases of rheumatoid arthritis starting in established hemiplegia described by Thompson and Bywaters (1962), all 4 showed 0% symmetry by these clinical criteria despite the total number of joints involved ranging from 7–14.
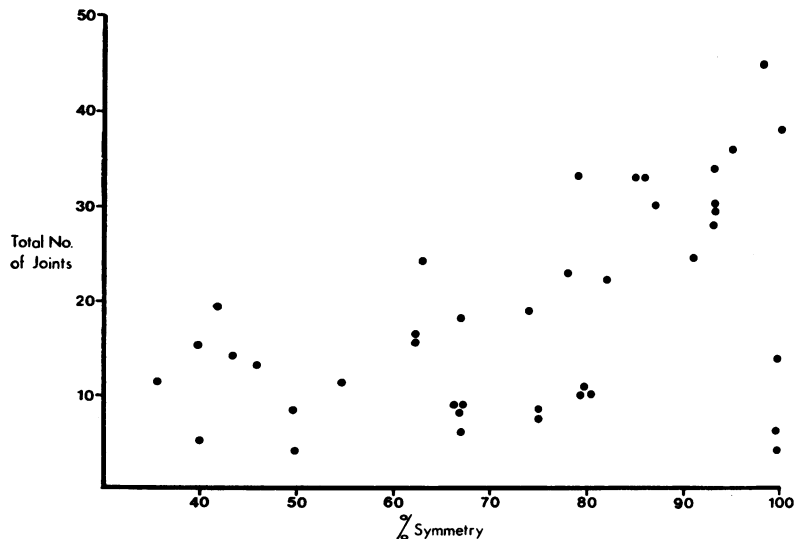

FIGURE. *Symmetry in 40 cases of RA observed at Hammersmith Hospital (1951–1952)*

Reference

THOMPSON, M., AND BYWATERS, E. G. L. (1962) *Ann. rheum. Dis.*, **21,** 370 (Unilateral rheumatoid arthritis following hemiplegia)