

Anthroposophic therapy of respiratory and ear infections

In a study presented in this journal [1] we compared primary care patients self-selected to anthroposophic (AM) or conventional therapy for acute respiratory and ear infections. Patients treated by AM physicians had more favourable clinical outcomes; they used antibiotics less frequently, reported less adverse effects and were more satisfied with their therapy. The publication was accompanied by two editorials [2, 3]. One of them, by Edzard Ernst, finds the study “annoying”, “worthless”, “fatally flawed”, “waste of resources”, “worse than no evidence”, and even “endangering the health of our patients” [3]. This attack is fraught with errors and misconceptions:

- 1) Ernst suggests the judgement of the AM physicians was “clouded by their hope for a positive result”. – He failed to notice (or acknowledge) that outcomes were documented by the patients, not the physicians.
- 2) Ernst discredits the study as irreproducible since diagnosis was “vaguely based on clinical judgement”. – As he might have noticed, the inclusion of patients was not based on their diagnoses but on their symptoms, mirroring primary care practice [4]. This does not prevent reproduction of the study.
- 3) Ernst dismisses the outcomes “complete recovery” and “major improvement” as subjective and not validated. – However: these outcomes and similar clear-cut global ratings are widely used in clinical trials; they even serve as benchmarks for validating other scales [5].
- 4) According to Ernst, four factors could have created false positive results:
 - The AM group had more children. – We of course presented children’s and adults’ results separately, and adjusted outcomes for age.
 - AM patients might have “suffered less frequently from difficult to treat conditions”. – Again, subgroup analyses included four prognostic symptom variables as well as age, gender, and country (AM had better outcomes in 184 of 200 comparisons), and outcomes were adjusted for symptom differences.
 - Ernst speculates that conventional physicians “may have prescribed antibiotics unnecessarily” – although their prescription rate (27%) was lower than usual (average 39–97% in similar studies [1]). Ernst’s rhetoric – “we all know that this can have detrimental effects” – is contrary to evidence: In placebo-controlled trials antibiotics do not nega-

tively affect the short-term clinical course of respiratory and ear infections [1].

- Since AM often requires more active engagement of patients, Ernst suggests “this could create a more powerful placebo effect”. – However, as we had stated clearly: the study was a system comparison, evaluating AM and conventional medicine as whole treatment packages, including physician-patient interactions. If AM should have strong placebo effects, these desirable effects would not be bias, but part of the AM package.

- 5) More fundamentally, Ernst rejects the study because we compared self-selected patients instead of randomising them. – He fails to see that for the objective of this study, randomisation would not have been possible. Our explicit objective was to study AM under natural conditions, i. e. patients freely choosing to see AM physicians, compared to patients seeing conventional physicians. This real-world comparison of two medical settings precludes randomisation. Moreover, only 3% of AM patients in our study were willing to be randomised.

Ernst’s rhetoric diverts attention away from the truly outstanding finding of this study – a finding which cannot be explained by baseline differences: the extremely low antibiotic use in AM settings (1% in AM group vs. 27% in the conventional group at study entry; 6% vs. 34% throughout the four-week follow-up).

In an era of increasing antibiotic resistance [6], this finding challenges conventional medicine. If AM, as our results suggest, can deal successfully with acute respiratory and ear infections, thereby reducing antibiotic use to a tiny fraction of ordinary rates (6% instead of 34–97% [1]), then we should look into the “black box” [2] of anthroposophic physicians’ offices and ask how they educate and treat their patients to achieve this success [7].

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References

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