Handsearching trauma surgery journals - is it worth the effort?

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Introduction:

An important task for the Cochrane Collaboration is the search for high-class studies, such as randomized clinical trials (RCTs). Since many German language journals in the field of trauma surgery are not indexed in Medline or Embase, it is important to search these journals by hand and list them for the Controlled Clinical Trials Register within Cochrane Library. We report on an ongoing handsearch project.

Methods:

Five trauma surgery journals were searched from the actual issue backwards to the first issue or 1963 (whatever first): "Hefte Unfallchirurgie" (previously called "Hefte Unfallheilkunde"), "Unfallchirurgie" (now called "European Journal of Trauma"), "Trauma Berufskrankheit", "Aktuelle Traumatologie", and "Unfallchirurg" (previously called "Unfallheilkunde"). Searching these journals page by page (about 80.000 pages in total) required a student position. According to the Cochrane Collaboration's standards, we searched studies in which a randomised comparison group was mentioned (RCT) or likely because other key terms were described, e.g. placebo. The studies were registered and bibliographically processed at the German Cochrane Centre.

Results:

Until today, a total of 160 studies were located. most of which were true RCTs. The biggest proportion of trials was found in "Hefte Unfallchirurg" (n= 113) and "Unfallchirurg" (n= 34). The oldest study dated back to 1968 and was pseudo-randomized. The rate of RCTs continually increased over the years. Today, about 20 RCTs are published in these five German journals per year. Thematically, the interest of trauma surgeons focused on only a few issues, such as low molecular heparin, ancle distorsion, and anterior cruciate ligament repair. One interesting RCT on human albumin was found. This study had been missed in an influential Cochrane Review published in 1998.

Conclusions:

Trauma surgeons who publish their data in small German journals run a high risk that their studies will never be noticed by the scientific community. Only continuous handsearching activities can ensure that such data will not be forgotten. The proportion of high-class evidence in German surgical journals is disappointingly small.

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