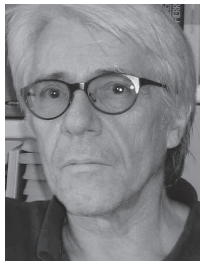


BACKGROUND INFORMATION

International Neurotrauma Research Organisation (INRO) – 12 years of outcomes research in traumatic brain injury (TBI)

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Traumatic brain injury (TBI) is the leading cause of death and morbidity in patients aged 1–45 years, and is a serious public health problem. In 1997, W. Mauritz et al.² did a survey of all Austrian centres that frequently treated patients with TBI. They found that there was a wide variation in treatments, that outcome was not adequately documented and proposed to establish an Austrian database for patients with severe TBI. In 1998 W. Mauritz and M. Rusnak met at a TBI conference in Prague, and together with J. Ghajar from the US-based Brain Trauma Foundation they decided to start an international collaboration. INRO was founded in 1999 as a result of this meeting, to facilitate grant applications to international organisations. Since then, INRO has coordinated a number of projects focussed on implementing guidelines for TBI management and monitoring the results of this. The first project funded by the SOROS Foundation was carried out between 1999–2001 in Central and Eastern Europe, involved more than 20 centres (>1000 patients) and demonstrated that treatment according to evidence-based guidelines was associated with a 50% reduction in TBI deaths and a 50% increase in rates of good outcome. The first Austrian project (2001–2004; sponsors: Austrian National Bank & AUVA) covered >500 patients in 7 centres and established a database of epidemiology and treatment of severe TBI in Austria^{3–5,9–11}. A new database was developed to collect the data for this and all further projects. Smaller projects involved centres in Slovakia (2002–2004; sponsor: local). A large project implemented TBI guidelines in Croatian, Bosnian, and Macedonian centres (2002–2005; sponsor: European Union) and covered more than 700 patients. It showed that TBI treatment according to guidelines required a well-funded health care system⁸. The next Austrian project (2007; sponsor: AUVA) focussed on intracranial pressure monitoring⁷ and analysed 1900 patients with TBI from the ASDI database of ICU patients. The INRO database which now has data from more than 1600 patients has also been used to analyse outcomes of special TBI cases^{1,6}. The most recent Austrian project started in 2009 (sponsors: Ministry of Health & AUVA) and studies the impact of prehospital and early hospital treatment on outcomes after TBI. So far, this project has covered 448 cases and has led to new recommendations for the early management of TBI. These recommendations (in German) are found on our website (www.igeh.org).

INRO cooperates with other groups that study TBI and trauma outcomes (e.g. European Brain Injury Consortium, EuroTARN, ASDI) and has well-established contacts to more than 30 trauma centres all over Eastern and Southern Europe. A number of Research Fellows from Austria as well as from other European countries (Italy, Slovakia, Croatia, Bosnia) have done research with INRO and a number of seminars on TBI management and TBI research have been held. Anyone interested in TBI is welcome to contact us with ideas for projects or studies.

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