Corrigendum

Survival and cause of death after traumatic spinal cord injury. A long-term epidemiological survey from Denmark

A Hartkopp, H Brønnum-Hansen, A-M Seidenschnur, F Biering-Sørensen
Spinal Cord 1997; **35**: 76–85.

Since publication of the above paper the authors have noted certain errors in their calculations details of which follow.

In connection with supplementary analyses of our database evaluating the risk of suicide among spinal cord injured, we found an error in the computation of person years for the first (1953–1973) observation period. This miscalculation resulted in a systematically overestimation of the mortality in this early period. As a consequence our remarks in the discussion and our conclusions regarding the mortality changes over time from the first (1953–1973) to the second (1972–1990) observation period shall be taken with some caution, and specially for the men they are not valid. The corrected Tables 4 and 7, and Figure 2 are now provided.

Table 4 Standardised mortality ratios (SMRs) for various causes of death by gender. Period of injury 1953–1971. End of follow-up: December 31, 1973. An empty cell indicates that only 0 or 1 death recorded, and this is why SMR is not given

Cause of death	Men	SMR (95% Confidence limit)	
		Women	All
Neoplasms	–	–	–
Cardiovascular diseases	1.22 (0.53–2.41)	–	1.25 (0.57–2.38)
Ischemic heart disease	–	–	0.41 (0.05–1.49)
Cerebrovascular disease	–	–	–
Lung embolus	45.0 (9.27–131)	–	38.5 (7.93–112)
Other natural causes	11.3 (7.65–16.2)	21.3 (8.55–108)	12.4 (8.76–17.1)
Septicaemia	234 (28.3–845)	–	317 (65.4–927)
Lung diseases	17.3 (9.47–29.1)	30.0 (3.63–43.8)	18.3 (10.4–29.7)
Pneumonia	35.2 (14.2–72.5)	71.9 (8.70–260)	39.7 (18.2–75.4)
Lung diseases excl. pneumonia	11.5 (4.62–23.7)	–	10.8 (4.34–22.2)
Digestive organs	5.81 (1.20–17.0)	–	5.19 (1.07–15.2)
Urogenital system	10.3 (2.12–30.0)	–	8.65 (1.78–25.3)
Uncertain	29.1 (11.7–59.9)	120 (24.7–350)	37.6 (18.0–69.2)
Uraemia	669 (246–1456)	–	674 (271–1389)
Uncertain excl. uraemia	–	84.7 (10.3–306)	11.7 (2.42–34.3)
Urogenital system and uraemia	29.8 (13.6–56.7)	–	28.0 (13.4–51.5)
Accidents and suicide	1.51 (0.31–4.42)	14.1 (1.71–51.1)	2.35 (0.76–5.49)
Accidents	–	–	1.55 (0.19–5.60)
Suicide	2.60 (0.32–9.40)	–	3.59 (0.74–10.5)
Total	2.80 (2.02–3.78)	6.08 (2.91–11.2)	3.12 (2.33–4.10)

Table 7 Previous studies on survival of individuals with spinal cord injury, which could be compared to life table values calculated from the present study

<i>Authors</i>	<i>Period of injury/ End of follow-up</i>	<i>Geographical area</i>	<i>Inclusion</i>	<i>Cases/ Death</i>	<i>Survival parameter</i>	<i>Result in reference study</i>	<i>Comparable result from present study</i>
Mesard, <i>et al</i> ²⁴	01.10.1955- 30.09.1965/ 30.06.1967	Washington DC, USA	White SCI men, treated in Rehabilitation Hospital. Survived the first 3 months.	2323/1276	10 year cumulative survival probability	86% paraplegic 80% tetraplegic	84.6% (1953–1971)
Kraus <i>et al</i> ⁴	01.01.1971- 31.12.1971/ 31.12.1976	California, USA	All SCI individuals residents in Northern California (5.8 mill). Survived more than 24 hours.	619/320	5–6 year cumulative survival probability	84%	92%, (5-year) 91%, (6-year) (1953–1990)
DeVivo <i>et al</i> ²⁵	01.01.1973- 31.12.1980/ 31.12.1981	Multicenter, USA, 7 centres	All SCI individuals treated in Rehabilitation Hospital within a year from SCI. Survived more than 24 hours. Losses in follow-up.	5131/459	7 year, cumulative survival probability	86.7%	90.7% (1972–1990); 87.6% (1953–1971)
DeVivo <i>et al</i> ²⁶	01.01.1973- 31.12.1984/ 31.12.1985	Multicenter, USA, 13 centres	All SCI individuals treated in Rehabilitation Hospital within a year from SCI. Survived more than 24 hours. Losses in follow-up.	9135/-	7 year and 12 year cumulative survival probability	89.2%, (7 year); 85.1%, 78.2%, 85.7% (12 year, estimated, worst and best calcu- lation, respectively)	90.7% (7-year 1972– 1990); 83.2% (12-year 1972–1990)
DeVivo <i>et al</i> ²⁷	01.01.1971- 31.12.1986/ publ. 1992	Multicenter, USA, 6 centres	All SCI individuals treated in Rehabilitation Hospital within a year from SCI. Survived more than 24 hours. Losses in follow-up.	6563/-	2 year cumulative survival probability	90.9% (1973–77); 90.4% (1978–80); 92.1% (1981–83); 94.1% (1984–86)	94.7% (1953–1971); 97.0% (1972–1990)
Geisler <i>et al</i> ¹⁷	01.12.1973- 31.12.1980/ publ. 1983	Canada	All SCI treated in Rehabilitation Hospital. All deaths within 12 months of trauma were excluded. Losses in follow-up.	1478/194	extra death per 1000/years	15.2	14.2 (1953–1971); 8.6 (1972–1990)

No visible difference between survival for the matched populations 1953-1971 vs 1972-1990.

Figure 2 Survival probability of spinal cord injured individuals and of matched general population. Periods of injury: 1953–1971. End of follow-up: December 31, 1973. 1972–1990. End of follow-up: December 31, 1992