Author Year; Country Dates included in the review Total sample size Level of evidence Type of study Score	**Methods Databases**	**Outcomes**
DeForge et al. 2005; Canada Reviewed published and unpublished articles between 1966 and 2003 N=66 <u>Level of evidence</u> Jadad Scale – RCTs Newcastle-Ottawa Scale – Non RCTs <u>Type of studies</u> Not specified AMSTAR=7	**Methods:** Literature search for published and unpublished studies from databases and selected annual proceedings, of any research design or language, that enrolled male, adult/adolescent populations with SCI reviewing fertility interventions with pre- and post-intervention fertility measures Interventions included electrical and vibrational stimulation, testicular biopsy, intracytoplasmic sperm injection (ICSI) and in vitro fertilization (IVF). Outcome measures included sperm quality and pregnancy and live birth rates. **Databases:** MEDLINE, PreMEDLINE, CINAHL, Cochrane Central Register of Controlled Trials, SocioFile, and PsycINFO.	**1.** Systematic review restricted to male fertility post-SCI, as there were no case-series studies investigating fertility issues such as pregnancy rates, live births and complications or obstetrical management issues in females after SCI. **2.** Ejaculation interventions in the last decade resulted in response rates of 95% (95% confidence intervals (CI) 91%, 99%), with 100% response rate reported in several recent publications. **3.** A total of 13 studies (1993–2001) yielded pregnancy rates of 51% (95% CI 42%, 60%) in partners of SCI males. Of these, 11 studies (1993–2003) yielded live birth rates of 41% (95% CI 33%, 49%), an improvement overtime. **4.** Reproductive success limited by prevailing low semen quality in SCI males. **5.** Sperm freezing would probably not enhance fertility unless the sperm were to be frozen almost immediately after injury.
Patki et al. 2008; UK Reviewed published articles from PubMed and Medline, dates not mentioned N=not stated Level of evidence Methodological quality not assessed Type of studies Not described AMSTAR=0	**Method:** Searched using the key words: spinal cord injuries, fertility, sexual dysfunction, and spermatogenesis, for articles on the effects of SCI on semen parameters that may contribute to poor motility and poor viability. **Databases:** PubMed and Medline	**1.** The distinguishing character of poor semen quality in men with SCI is abnormal sperm motility and viability, not the sperm count which remains comparable to the age-matched population. The cause of this asthenozoospermia appears be multifactorial, but not related to time since injury, elevated scrotal temperature, method of bladder management or method of ejaculation. **2.** Although abnormal hormonal levels in urine and blood have been reported in many studies, this does not seem to be the primary cause of infertility because equal numbers of studies report normal findings. **3.** 2 studies reported a decrease in sperm motility in men with SCI associated with elevated scrotal temperatures. However, a more recent study contradicted this, finding no correlation between scrotal temperature and semen parameters. **4.** Men with SCI have elevated levels of reactive oxygen species in semen which is associated with a decrease in fertility. **5.** Seminal plasma from men with SCI decreases sperm motility.

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		6. Axonemal defects and abnormalities of flagella were identified in the majority of patients with SCI.