## The History of Spinal Injury in Wales

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The first known description of a spinal injury was in Egypt around 2500BC on the Edwin Smith Surgical Papyrus and for those paralysed it was "an ailment not to be treated." Further accounts are found in Homer, Hippocrates, the Talmud and the Bible, all with fatalistic outcomes.

Galen (131-201AD) noted the more caudal the level, the more focal the paralysis. He differentiated between motion and sensation as the two basic functions of life. He studied gladiators falling from chariots, probably the earliest recorded spinal injuries from road accidents. Ambrose Pare (1564-1598), surgeon to the French army, recommended laminectomy but it was Henry Cline (1750-1827) who performed this, though the patient usually died. Sir Charles Bell regarded the operation as dangerous and useless as the damage to the spinal cord occurs at the time of injury and not by continuous pressure.

By the 1<sup>st</sup> World War, 85% of patients with paraplegia died of urinary infections or pressure sores, but then the large number so wounded led to an improved outcome due to more organised management with the opening of the Royal Star and Garter Home in Richmond in 1916. The survivors were moved to convalescent facilities, such as, in Wales, Llandrindod Wells and Rookwood in Cardiff, though they hardly ever achieved real independence.

Further injuries in the 2<sup>nd</sup> World War caused the government, under the guidance of George Riddoch, to set up a spinal injuries centre at Stoke Mandeville in 1944, just in time for D Day, under the direction of Sir Ludwig Guttmann whose rigorous attention to pressure areas, bladder management and nutrition led to an improved life expectancy. He opposed the hitherto fragmentation in the treatment of spinal cord injuries and brought it under one umbrella from injury for life. He paid particular attention to the experiences of patients themselves and encouraged them to engage in sport and gainful occupations.

In Wales, as in other areas of the UK, many spinal cord injuries occurred through mining but with the opening of Talygarn as a rehabilitation facility in 1943 and later the spinal injury unit at Rookwood in 1952 by Sir Ludwig Guttmann, the outlook for them improved. These centres provided an integrated holistic approach to treatment affording dignity to the injured and resulting in an almost normal life expectancy as well as the opportunity for productive employment.

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