# **Bones of Contention: the Medico-Legal Issues Relating to Charles Byrne, 'the Irish Giant'.**

THOMAS L. MUINZER<sup>1</sup>

This article engages with the medico-legal issues pertaining to the life and legacy of Charles Byrne, a celebrity Irish 'giant' who made a name for himself in Georgian Britain and whose remains are currently the subject of a highly controversial display in the Hunterian Museum, London. The article addresses Byrne's historical life and times, then proceeds to consider both the contribution that his remains have made to medical research and a variety of legal issues relevant to his posthumous treatment. In the latter stages of the discussion it is observed that the Byrne exhibit at the Hunterian Museum raises issues that are directly pertinent to contemporary viewers of the display, most notably with respect to the issue of burial instruction; Byrne's skeleton partially symbolises the onlooker's own circumstances.

## Introduction

Charles Byrne (1761-1783) was an eighteenth century celebrity Irish 'giant' from County Londonderry/Derry who achieved renown in Georgian Britain by exhibiting himself as a human curiosity. In the immediate wake of his death his corpse was procured surreptitiously by persons in the pay of eminent surgeon John Hunter (1728-1793) whilst being transported for burial. Hunter added the giant's skeleton to his vast collection of anatomical specimens. Over two centuries later this collection remains the basis of Hunter's memorial museum, the Hunterian Museum, housed within London's Royal College of Surgeons. The skeleton remains on public display as a centrepiece of the collection. The remains have been the subject of a series of medical studies, and most recently research involving the skeleton's DNA (published 2011) has yielded valuable insight into a specific connection between familial isolated pituitary adenoma and Northern Ireland (Korbonits *et al.* 2011). The renewed medical attention that the skeleton has received has coincided with pronounced

 $<sup>^1</sup>$  Thomas Muinzer is a  $3^{\rm rd}$  year PhD Candidate in the School of Law at Queen's University Belfast - tmuinzer01@qub.ac.uk.

criticism challenging the appropriateness of the Charles Byrne exhibit itself and the apparent neglect of the dead man's own wishes (Doyal and Muinzer 2011).

This article introduces the historical life and times of Charles Byrne. It moves on to address the rich legacy of medical research that has centred upon his remains – in particular the recent DNA research – and proceeds to draw out a series of contemporary medico-legal issues evoked by the combination of the giant's history and the present display. The closing section endeavours to draw an applicable moral lesson pertinent to the skeleton's future.

#### The "Wonderful Irish Giant"

Byrne was born in 1761. His childhood years were spent amongst the Irish peasant class near to the border dividing Counties Londonderry/Derry and Tyrone, at a remote rural hamlet called Littlebridge. As a teenager he found himself growing to an increasingly prodigious height. His exact height is not reliably known, however examination of his skeleton suggests that at the peak of growth he probably reached about 7 ft. 7 in. (Frankcom and Musgrave 1976: 104).

As his fame began to spread he started to receive invitations to the major stately home in the area, Springhill House, where he was welcomed with fascination and acclaim. He decided to leave Northern Ireland in pursuit of adventure and wealth and began exhibiting himself as a human curiosity in Scotland, swiftly making a successful impression upon the public. By early 1782 he had arrived in London, where he would remain until his death.

His name quickly became a common feature of London celebrity life, as newspapers set about reporting upon his demeanour and lifestyle to an interested public. In his London publicity and associated media coverage Byrne often took the stage name 'Charles O'Brien'. The popular Irishman was also frequently described as 'the wonderful Irish giant': "Just arrived in London", *The Morning Herald* declared grandly, "[is t]he wonderful Irish Giant... [H]e is the most extraordinary curiosity ever known, or ever heard of in history" (*The Morning Herald* 17 July 1782). By the middle of 1782 the city's new arrival had inspired a theatre piece that was soon playing to large audiences at London's Haymarket Theatre, *Harlequin Teague*. All of this reinforced a public desire to meet the acclaimed giant in person, and thus business was thriving in the modest Charring-Cross rooms where Byrne was exhibiting himself to the paying public.

As his success intensified, however, so too did the negative impacts of his acromegalic gigantism.<sup>2</sup> It has also been speculated that he contracted tuberculosis; some supporting historical evidence is provided by a mention of Byrne suffering 'consumption'<sup>3</sup> in Tom Taylor's *Leicester Square* (Taylor 1874: 404). At the age of 22 a culmination of his ailments coincided with the unfortunate theft of his money. While drinking in a public house near his home one evening in April 1783, £700 was pickpocketed from his person, a vast proportion of the giant's earnings. Byrne immediately entered into a swift state of physical and emotional decline and died two months later.

#### **Enter John Hunter**

During the final weeks of his life Byrne become fearfully aware that Georgian Britain's preeminent surgeon and anatomist John Hunter was eager to get hold of his corpse for dissection and probable display. A Scotsman who had moved to London in 1748 to work at his brother William's bourgeoning anatomical school, Hunter had begun to turn out a large body of important medical research. Much of his method was founded on meticulous experimentation on his array of anatomical specimens.

Hunter practiced and taught anatomy in an era where the dissection of the human corpse was a social taboo and widely feared practice. The medical establishment therefore found it extremely difficult to secure sufficient quantities of cadavers for the purposes of research and teaching. Thus the trade of 'the Resurrectionists' flourished, that is, the illegal practice of robbing corpses from graves and selling them covertly or under false pretences to the surgeons (Richardson 1987).

Many surgeons were unaware of the unlawful manner in which the corpses they were purchasing had been obtained; however Hunter – a rough, unceremonious and fiery character – was considerably more pro-active in his dealings with the underworld than most, as his biographer Wendy Moore elaborates (Moore 2006: 25-26):

Hunter... had gone further than any other anatomist of his day in his connections with the Georgian underworld. Since embarking on anatomy as an enthusiastic youth, Hunter had fostered the closest and friendliest of relations with the so-

 $<sup>^{2}</sup>$  Acromegaly occurs as a consequence of an over-production of growth hormone, and tends to result in distorted bone growth. Gigantism is also triggered by an excess of growth hormone, causing people to grow to an uncommonly large height.

<sup>&</sup>lt;sup>3</sup> Consumption was a common expression for pulmonary tuberculosis, that is, tuberculosis of the lungs.

called Resurrectionists; he was renowned for offering the highest price to ensure a regular supply of dissection material for himself and his students.

Anxious to avoid Hunter and the Resurrectionists, Byrne concocted a plan to ensure his secure burial: he "begged on his deathbed in 1783 to be buried in a lead coffin at sea in an effort to keep out of John Hunter's clutches" (Moore 2006: 26). Upon his death a contingent of Irish colleagues set the burial arrangements in motion and cast his coffin into the sea at Margate.

Unbeknownst to the funeral party, Byrne's corpse was not in the coffin. Instead, Hunter had bribed an undertaker to swap it for dead weight and arranged for its covert conveyance to his home in a cart (Taylor 1874: 404-406). Hunter promptly reduced the corpse to its bones and packed them away (Ottley 1839: 78). Four years later when rumour and speculation had died down he revealed to interested parties that he was now in possession of a major addition to his specimen collection. Careful not to connect the remains to Byrne, he described the new piece as the skeleton of a "tall man" (Taylor 1874: 406-407).

# **Medical Research**

Charles Byrne's skeleton has been at the centre of a significant body of medical research. Whilst it is now known that the presence of a growth hormone secreting pituitary adenoma prior to epiphyseal fusion will result in gigantism, the purpose of the pituitary was entirely unclear at the time of Byrne's death. Prior to the Georgian period Galen and Vesalius had speculated that the pituitary discharged mucus into the nose (Welbourn 1990: 89). Francois Magendie, born in the year that Byrne died, concluded instead that the pituitary was a cerebral lymph gland that functioned to discharge waste products from the brain into the blood; this remained the dominant medical understanding when Pierre Marie described acromegaly in 1886 (Bergland 1965: 268).

In 1902 a hormone system had been postulated that suggested a theoretical link between pituitary tumours and acromegalic gigantism (Bayliss 1902). It was in this context that American neurosurgeon Harvey Cushing began to take an interest in the Charles Byrne skeleton. Cushing's research in the early years of the twentieth century enabled him to posit that acromegaly and gigantism were the results of growth hormone hypersecretion (Cushing 1909) and further allowed him to interpret the central importance of the pituitary in endocrine function (Cushing 1912). Whilst carrying out this work Cushing appealed to Sir Arthur Keith, then curator of the Hunterian Museum, to open the skull of the Byrne skeleton. This was

done, and Cushing observed the skull's greatly enlarged pituitary fossa, allowing him to draw an evidential link between pituitary adenoma and gigantism.

In the 1960s Bergland obtained the first skull films from the skeleton, publishing the x-rays along with a brief analysis in 1965 (Bergland 1965). In 1980, Doctors Alexander M Landolt and Milo Zachman also examined the skeleton, reporting that it exhibited a bone age of around 17 years; Byrne was therefore still growing at the time of his death (Landolt and Zachman 1980).

More recently, a team of endocrinologists led by Marta Korbonits examined the skeleton's DNA, publishing its findings in 2011 (Korbonits *et al.* 2011). The researchers took DNA from two molars, identifying a germline mutation in the aryl hydrocarbon-interacting protein gene. They compared the Byrne DNA with DNA taken from a cohort of contemporary families with an incidence of familial isolated pituitary adenoma and found that DNA from four Northern Irish families within the group exhibited the same mutation. The findings help to elucidate Northern Ireland's indigenous connections with gigantism and also allow persons carrying the genetic mutation at present to be monitored and treated where necessary (Korbonits *et al.* 2011: 49). The research further establishes that Byrne and these persons shared a 'common ancestor' who lived somewhere between 375 and 3750 years ago, according to the team's calculations derived from coalescent theory (Korbonits *et al.* 2011: 47).

In their discussion of the Northern Irish findings the researchers have noted that "[t]he number of carriers of this haplotype in the generations of family members who are now alive could be several hundred" (Korbonits *et al.* 2011: 48). Early last year this galvanized members of the team to set up makeshift stalls in the car parks in shopping centres in the pertinent area of Northern Ireland (East Tyrone and South Londonderry/Derry). They engaged in "appealing for adults... to have their DNA tested for the altered gene"; the screening method involved encouraging the customers to "giv[e] a saliva sample by spitting into a tube" (University of London 2013). The results of the screening are forthcoming.

# The Law

The law did not grant weight to the burial instructions of the deceased in Byrne's era. Consequently, Hunter and those in his pay did not act unlawfully in preventing his wishes from being carried out. Further to this, the law also upheld a 'no property' rule in both living and dead bodies, meaning that the human body was not classified as property capable of ownership; one cannot 'steal' that which cannot be owned, and thus Hunter and his allies were not guilty of the theft of Byrne's corpse (Muinzer 2013).

Despite this, there was a legal imperative to secure the disposal of corpses on grounds of both public health and public decency. In order to facilitate this necessity the law had developed a 'duty to bury' principle, under which certain specific persons had a legally designated duty to bury the dead. For example, the legal duty to bury a husband automatically fell to the dead husband's wife, and the wife automatically acquired a possessory right to the corpse for this purpose.<sup>4</sup>

Hunter and his allies therefore unlawfully interfered with the 'duty to bury' principle. His treatment of the corpse is also likely to have contravened the common law's public decency standards. As noted above, the law recognised that adequate burial of the dead was necessitated on grounds of both public health and decency – see for example the case *Jenkins v Tucker* (1778) – and it is likely that in reducing Byrne's corpse to its skeleton in his cauldron with the intention of placing its bones on display Hunter engaged in action that would have been considered indecent. Furthermore, the action of switching the body for dead weight and thereby causing the weight rather than the body to be buried is likely to fall within the parameters of the longstanding common law offence of 'preventing the lawful burial of a body' (Hirst 1996).

At present the trustees of the Hunterian Museum have legal custody of the remains, the skeleton constituting one part of the collection that the British Government presented to the Royal College of Surgeons in 1799. None of the giant's blood relations are known today. If such relatives were to step forward they could endeavour to activate a familial possessory right to the remains for the purposes of burial under the duty to bury principle. Whether or not the claim would prove successful in a court of law is open to debate. Matthews' influential paper 'Whose Body' indicates that such an argument would at the very least be legally credible (Matthews 1983: 219-220).

## **Byrne as Symbolic**

The law as it stood in Byrne's time and the law as it stands currently are remarkably similar. At present burial instruction is not legally binding: the 'no property' in the body rule remains in place; the duty to bury principle and the associated possessory right for the purposes of

<sup>&</sup>lt;sup>4</sup> For a survey of this obscure area of law by a Northern Irish lawyer see 'Dead, but not Buried: Bodies, Burial and family Conflicts' (Conway, 2003).

burial are still operative; and, the framework setting out the hierarchy of those who are imbued with this duty to bury is still based upon the conventional 'family unit' structure.

Keeping this historical similitude in mind, one notes that it is possible to interpret the Charles Byrne exhibit at the Hunterian from a range of perspectives. One can perceive it as a medically interesting skeleton, as a doctor might; or, as an installation provoking an intricate series of legal questions, as a lawyer might. Alternatively one might simply experience it as an awe-inspiring collection of enormous bones, as a visitor to the Hunterian might. Yet for doctor, lawyer and museum-goer alike the exhibit is also in some sense *personally relevant* to each observer. The author offers three observations in support of this proposition.

Firstly, like Byrne, most spectators are likely to have developed some set of personal intentions in life that they seek to project onto what will become of their own remains in death. For example, an individual might intend his or her dead body to: be given to medical science; undergo a religious burial or a humanist cremation; or, be left to the devices of surviving relations and loved ones so that they can do as they wish as a natural part of the grieving process. Secondly, and again like Byrne, in order for these wishes to be borne out one cannot rely on the law, due particularly to the fact that one's burial wishes do not carry legal force. Thirdly, and again like Byrne, what one *does* rely on is the *moral* force attaching to one's posthumous intentions and, in tandem with this, upon family, loved ones, and the wider community to accord those wishes a requisite level of respect.

The Byrne exhibit, therefore, is personally symbolic because, like Byrne, each contemporary individual relies in death upon respect for the wishes and choices that he or she has articulated in life.

Issues pertaining to the treatment of Byrne's skeleton remain unresolved. Medical ethicist Len Doyal and the present author have drawn attention to the following (Doyal and Muinzer 2011: 1292):

Past research on Byrne did not require the display of his skeleton; merely medical access to it. Moreover, now that Byrne's DNA has been extracted, it can be used in further research. Equally, it is likely that if given the opportunity to make an informed choice, living people with acromegaly will leave their bodies to research or participate in it while alive, or both. Finally, for the purposes of public education, a synthetic archetypical model of an acromegalic skeleton could be made and displayed. Indeed, such skeletons are now used in medical education throughout the world.

In light of these observations, an argument favouring the withdrawal of the Byrne exhibit on moral grounds seems overwhelming.<sup>5</sup> Given that the deceased desired burial, the removal of his skeleton from public display should precede the respectful and considered burial of the remains (Muinzer 2013).

# Conclusion

These conclusions place a duty on the Hunterian Trustees. Although Hunter's pivotal actions took place some two centuries ago, the Trustees and the members of the medical community involved in Byrne's narrative today have an obligation to think humanely about their own role in his story. As anatomist D Gareth Jones emphasises in *Speaking for the Dead* (Jones 2000: 150):

... scientists as moral agents must not hide behind a veil of ignorance of moral philosophy. The move from living healthy adults and children, to living damaged adults and children, and on to cadavers and skeletal material is a subtle one.

<sup>&</sup>lt;sup>5</sup> See the various endorsements of this view collected at http://freecharlesbyrne.bravesites.com/ (last accessed 6<sup>th</sup> of March 2014).

## **Bibliography**

Bayliss, WM. and Starling, EH. (1902) 'The mechanism of pancreatic secretion' *Journal of Physiology*, 28: 325–353.

Bergland, RM. (1965) 'New information concerning the Irish Giant' *Journal of Neurosurgery* 23(3): 265-269.

Conway, H. (2003) 'Dead, but not Buried: Bodies, Burial and family Conflicts' *Legal Studies* 23(3): 423-452.

Cushing, H. (1909) 'The hypophysis cerebri. Clinical aspects of hyperpituitarism and of hypopituitarism' *Journal of the American Medical Association* 53: 249–255.

Cushing, H. (1912) The Pituitary Body and its Disorders. Philadelphia: J. B. Lippincott Co.

Doyal, L. and Muinzer, TL. (2011) 'Should the Skeleton of "the Irish Giant" be Buried at Sea?' *British Medical Journal* 343: 1290–92.

Frankcom, G. and Musgrave, JH. (1976) The Irish Giant. London: Duckworth.

Hirst, M. (1996) 'Preventing the lawful burial of a body' Criminal Law Review 96: 101-103.

Jenkins v Tucker (1778) 126 ER 55.

Jones, DG. (2000) Speaking for the Dead: Cadavers in Biology and Medicine. Dartmouth: Ashgate.

Korbonits M. et al. (2011) 'AIP Mutation in pituitary adenomas in the 18th century and *today' New England Journal of Medicine*. 364(1): 43–50.

Landolt, AM. and Zachmann, M. (1980) 'The Irish giant: new observations concerning the nature of his ailment' *Lancet*, 315(8181): 1311–1312.

Matthews, P. (1983) 'Whose body? People as property' Current Legal Problems 36: 193-239.

Moore, W. (2006) *The Knife Man: Blood, Body Snatching and the Birth of Modern Surgery*. Great Britain: Bantam Books.

Muinzer, TL. (2013) 'A grave situation: an examination of the legal issues raised by the life and death of Charles Byrne, the "Irish giant" *International Journal of Cultural Property* 20: 23-48.

Ottley, D. (1839) The Life of John Hunter. Philadelphia: Haswell.

Richardson, R. (1987) Death, Dissection and the Destitute. London: Penguin.

Taylor, T. (1874) Leicester Square. London: Bickers and Son.

University of London (Queen Mary). (2013) 'Scientists heading to Northern Ireland to investigate genetic mutation' Press Release. 4 February.

Welbourn, RB. (1990) The History of Endocrine Surgery. USA: Praeger.