Can I cremate my own leg?

PERSONAL VIEW **Simon Marlow**

If I wished to, could I cremate my own leg? The short answer is no.

During my first foundation year post, two patients asked for their amputated leg to be "cremated." Is this an unreasonable request? I argue not. If you wish to be cremated on death, you may want the ashes from all of your body at your funeral.

Unusually, the patients were both relatively young (28 and 40 years), and the indication for amputation was for chronic pain rather than vascular pathology, secondary to a childhood injury and a congenital abnormality. These young patients had made a long, difficult decision to have their troublesome leg removed rather than suffer with chronic pain and long term opioid use. They would be expected to make a quick and full rehabilitation with the use of an artificial limb. Their youth and prognosis may cause them to stop and think about the disposal of their leg. After such a traumatic decision process, they might want their ashes as a memorial or simply consider how they would like their amputated leg treated with dignity.

A crematorium cannot cremate any human tissue or organs from a living person. Paradoxically, patients are within their rights to sign for their leg and take it away with them; they may bury it themselves or burn it on a bonfire. However, they cannot arrange for their leg to be cremated under their own authorisation. The hospital's waste management service, which would normally incinerate human remains in bulk, can incinerate a limb and retain the ashes. This has to be done without contact with the patient and therefore does not have the support of a spiritual or religious centre, and the incinerator environment is not one in which people may wish their human remains to be dealt with. This is the option we were able to offer the two patients that inspired this discussion.

The reasons for this strange dichotomy are as follows. The Human Tissues Act states that "material taken from the living should normally be disposed of by incineration in accordance with current guidelines." However, the Ministry of Justice states that the act does not have "any provision that would prevent a crematorium cremating the leg of a living person."

Why crematoriums cannot cremate tissue from a living person seems to be down to their own acts and regulations. These stipulate that crematoriums handle human remains from deceased. The legislation itself states that there has to be confirmation and certification of death before cremation. Furthermore, the Cremation Regulations Amendment of 2006 has put in place legislation required for cremation of a body part that can be separated from the body before death, but again only against current Cremation Regulation (14A)—that of requiring death certification. So if the members of a deceased person's family feel that a body part should be cremated they can organise this. But if you want your own limb cremated while you are alive you cannot.

The amputees leaving the vascular unit are offered much support as part of the "amputee pathway." This is aimed to aid the physiological, psychological, and social transition to living without a limb. I'm sure there is also support for spiritual transition from local organisations, bereavement officers, and chaplains. But can a person's spiritual needs truly be met if a part of their body can't be prepared in the same way as the rest of their body would be after death?

Of course, a reasonable compromise is the incineration of human tissue by the hospital, the provision of ashes, and support from the hospital's bereavement and mortuary staff. Such requests seemingly not being that rare, I am surprised that there are not guidelines or a standard procedure for such provision.

A patient may bury their leg themselves or burn it on a bonfire, but they cannot arrange for their leg to be cremated under their own authorisation

The principles of medical ethics would suggest that patients with capacity have autonomy to decide how they would like their remains to be dealt with. Might offering cremation of an amputated limb benefit a patient's spiritual needs? I argue that it would. Would offering this service cause harm to the patient or family? I argue that it would not. Could you offer this to everyone on an equal standing? Yes, if the regulations were in place to provide a cremation service (or standardised incineration service with provision of ashes) to amputees. This is a simplified ethical argument, but I fail to see the reason why crematoriums themselves could not provide this service. The only restriction is that they require provision of adequate identification and certification of death.

With it being a reasonable request to deal with a living person's remains in such a way that their spiritual and religious beliefs are considered, should we not be able to cater for the cremation of human tissue after an amputation? I would be interested to hear other opinions on this issue and whether this is a problem nationwide.

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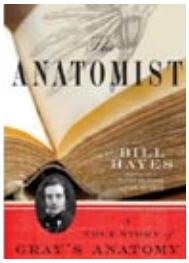
"If it had been required reading for the Spartan children on their overnight ordeal on the mountain, most of them would have reneged and headed for Lesbos to chill out and smoke lotus petals"
Liam Farrell on the *Drug and Therapeutics Bulletin*, p 776

REVIEW OF THE WEEK

Body builders

A new book fleshes out the lives of the Victorian doctors engaged in the Herculean task of producing the classic text *Gray's Anatomy*. **Colin Martin** reviews it

The Anatomist: A True Story of Gray's Anatomy
Bill Hayes
Scribe Publications, £12.84/$A32.95, pp 272
ISBN: 978 19212 1589 6
wwwscribepublications.comaubooktheanatomist
Rating: ★★★★



I missed the vital clue provided by American author Bill Hayes—in the form of an indefinite article in the subtitle to his engaging book—that it would not be the definitive account of Henry Gray (1827-61). In his penultimate chapter Hayes explains why a biography devoted solely to Gray would fill only a slim volume.

Fascinated by human anatomy, Hayes has made excellent use of the sparse data available on Gray's personal life, focusing his attention and research on Gray's collaborator Henry Vandyke Carter (1831-97). A junior medical colleague, Carter illustrated what was eventually titled *Gray's Anatomy of the Human Body*. It is really a biography of this book that Hayes provides, celebrating the 150th anniversary of its first publication in London in 1858, swiftly followed by the first US edition, and coinciding with publication of the 40th edition later this year.

Although the Royal College of Surgeons in London is currently exhibiting a selection of Carter's drawings from its collection of his work (*BMJ* 2008;336:688-9), Carter's contribution to *Gray's Anatomy* has been largely overlooked to date. Hayes rectifies this. Luckily for him and us, Carter kept meticulous records of his own medical studies and his work as a medical illustrator with Gray. Diaries—begun in 1845 and recording his daily logistics, together with loose leaved "reflections" begun later—enable Hayes to flesh out the skeletal frame of Gray's life. Carter's letters also provided information. Hayes intersperses his story of their 19th century collaboration in Dickensian London with a lively account of his own 21st century study of human anatomy, at dissection tables in California.

"Something about the look on Gray's face seized my imagination in a way that I can only compare—odd as this may sound—to love at first sight"

"Something about the look on Gray's face seized my imagination in a way that I can only compare—odd as this may sound—to love at first sight: an overpowering desire to get to know this man as thoroughly as possible," writes Hayes, on identifying Grays' dark-clad figure seated among two dozen white-smocked students in a group photograph taken at St George's Hospital in 1860. "My course of action then seemed perfectly clear: I would come to know Henry Gray by coming to know human anatomy." True to his word, he enrolled as an observer in undergraduate dissection courses at the University of California at San Francisco, assuming the role of a de facto demonstrator, among groups of younger pharmacy, physical therapy, and medical students.

Gray with students, St George's Hospital, 1860 (Gray is the dark-clad man immediately behind the cadaver's feet)

Gray registered as a medical student at St George's Hospital in May 1845, after which his stellar progress can be traced in official records of his examination results, awards, qualifications, and publications. By 1852 he was curator of the Anatomical Museum and a fellow of the Royal Society. Carter became an "articled student of medicine" at the Royal College of Surgeons; and in May 1848, three years junior to Gray, he too registered as a medical student at St George's. Gray is first mentioned in Carter's diaries in May 1849. On 14 June 1850 Carter offered to illustrate Gray's *On the Structure and Use of the Spleen*, initiating their historic partnership. In 1855 he began the Herculean task of providing illustrations for *Gray's Anatomy: Descriptive and Surgical*. Initially he drew them on paper, but later he began to draw directly onto the woodblocks from which the book's engravings were printed, saving the time and costs of having an engraver transfer the designs.

Although a non-fiction writer, Hayes is enough of a novelist to breathe life into his dusty research into the lives of Gray and Carter and also to tell a parallel tale of self discovery, one that is based on his own experience of dissection. And what happened to Gray's elusive personal papers? Hayes believes that they were burnt along with other contaminated household goods in 1861, after Gray's early death from smallpox at the age of 34, to prevent the further spread of infection. There is also a denouement relating to Carter's later career in India.

"Dissecting really has nothing to do with making things orderly," Hayes concludes. "The order is already there, just under the surface. The anatomist only has to uncover it." As his book demonstrates, the same might be said of writers, who use words rather than scalpels to expose our humanity.

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Bend it like . . . ?

FROM THE FRONTLINE
Des Spence

After my turn to be bullied, teased, and dropped in a game of British bulldog we lined up to be picked for football. Like their professional counterparts, the boy captains puffed on cigarettes as they chose the team. The ritual humiliation for the short, tall, or fat was being the last to be picked. Being tall, I was shoved into position between the twin piles of jumpers with the short and fat boys my defence. The light plastic ball seemed to be possessed and posed a constant threat of a slap in the face, necessitating much twisting and turning in the air on my part.

Twisting and turning is a standard manoeuvre in life. So it is with the code of conduct of the Association of the British Pharmaceutical Industry (ABPI)—a voluntary code without legal censure or enforcement. It is a code unknown to many doctors, who have been bent and battered for years by unfettered hospitality, sham meetings, and all manner of gifts in kind. But drug companies were never allowed to pay doctors directly just to meet, and I never saw money directly changing hands, except for one time.

In the mid-1990s a man appeared unannounced in the surgery and asked me to review some marketing material. He presented three posters and three slogans for a new campaign to launch a triptan. I pointed absentmindedly to the ones I liked, which took about 10 minutes. As he left he passed me an envelope: inside was £50 in cash. I never again agreed to be involved in marketing research. But this payment for marketing "feedback" was endemic—from cash and cheques sent in the post to payment to attend marketing meetings. It was essentially payment to doctors to listen to a sales pitch but was described as "feedback," thus sidestepping the ABPI code. What has become of this sham marketing "feedback" activity in the new code?

Unfortunately it continues. Recently I was offered a £250 fee for two hours of sitting on a local "advisory committee" on constipation. The old "cash in hand" activity has moved online. Certain medical websites ask for payment for sophisticated access to specific medical demographic data. Doctors are asked to complete marketing questionnaires and receive between £10 and £50 worth of vouchers for major retailers. All this activity is but naked illegitimate marketing, designed to raise the profile of new drugs, thus putting patients at risk from the overprescribing. Think Vioxx. The profession and the APBI have taken their eye off this swerving ball for too long.

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Passion required

THE BEST MEDICINE
Liam Farrell

A few years ago I felt compelled (out of both a sense of duty and a feeling of nausea) to chide the *Independent* about its complementary health guru. "Oooh, but he's very popular," was the newspaper's defence. So is pornography, I said. "Oooh no," they replied, in an outraged tone, "that wouldn't be ethical," though I reckoned that big tits on page 3 is a lot more ethical than snake oil salesmen peddling the illusion of knowledge to the gullible and the vulnerable.

But if even a newspaper as pretentious and worthily dull as the *Independent* can be trying to court the favour of the lumpen proletariat, then there is a lesson for all of us.

Every quarter someone (I don't know who, some anonymous benefactor who thinks I should be bettering myself) sends me the *Drug and Therapeutics Bulletin*. As I am sometimes a good doctor, I read it, though I usually skip straight through to the conclusion. I suppose this is cheating, but it's not an inviting read.

Its very appearance bespeaks gravity and austerity: no photographs, no colour, no poetic exaggeration, no leavening of humour, no swallow's flight of whimsy. If it had been required reading for the Spartan children on their overnight ordeal on the mountain, most of them would have reneged and headed for Lesbos to chill out and smoke lotus petals. It is unfailingly cold and logical, the Mr Spock of medical journals, half human, half Vulcan.

Even the conclusion is tough going: dry and academic, every objective assessment cogently and impeccably argued, but I do wish for a bit more passion, more Bones McCoy than Mr Spock. We are not robots, not automatons, and we respond to the heart as well as the head; "the best lack all conviction, while the worst are full of passionate intensity," said Yeats, but why should we cede the passionate intensity to the charlatans? We need ferocity, we need the rage to win, we need the rough beast.

If the *Drug and Therapeutics Bulletin* is right, and it always is, its message should be throbbing with righteous wrath, and appeal to the emotion as well as the intellect. I'm thinking something like "Mandy is 22, enjoys dancing, shopping and dwarf-smuggling, and wants to work for world peace and marry a footballer.

"And she thinks that this new non-steroidal anti-inflammatory is shit."

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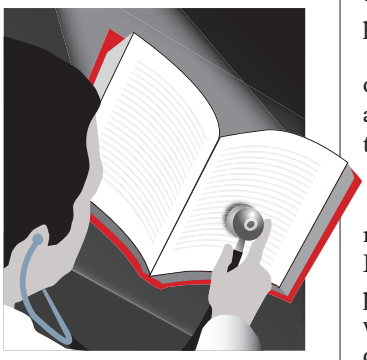
A lesson before dying

BETWEEN THE LINES
Theodore Dalrymple



Ionesco, who had no very high opinion of doctors and the pretensions of medicine, is telling us that . . . medicine is futile, a displacement activity

My study in the last house in which I lived overlooked a rather splendid church. From time to time as I sat at my desk I would watch a funeral procession arrive and depart from it.

The funerals were all of well-off people, to judge by the cars that the mourners drove. When the funeral service was over, the mourners would emerge from the church and at once answer the messages on their mobile phones, or look with anxiety at their watches. The funeral of the departed had obviously come at a most inconvenient moment: really, with a little effort, he could have timed his death better. But when is a convenient moment for death?

In reaction to, or illustrative of, what has been called the "crisis" in the Western attitude to death consequent upon the decline in religious belief since the 19th century, the Franco-Romanian playwright Eugène Ionesco wrote a play entitled *The King Departs* (*Le Roi se meurt*), which was first staged in 1962. One of the six characters is the doctor, who is also the surgeon, executioner, bacteriologist, and astrologer to the king.

The king, Bérenger I, has two wives, Marguerite and Marie, a guard, and a woman who doubles as nurse and cleaning lady called Juliette. During Bérenger's reign, the kingdom has all but collapsed. It is now a small, depopulated desert, natality has fallen to zero, the few remaining children are goitrous cretins or otherwise suffering from mental retardation, the two government ministers have disappeared while fishing in a stream, and the palace has fallen into near ruins. The king has an hour and a half to live, but has not yet been told that he is terminally ill, and when told protests that, as king, he has the right to stay alive or at least choose the hour of his death, and in any case is not ready yet to die, for he has not prepared himself.

The doctor is completely heartless and unsympathetic to the king's fear of death. When Queen Marguerite points out that Bérenger had her parents killed, as well as his brothers, cousins, the families of his cousins, and even their cattle, the doctor adds, "Your Majesty said that they were all going to die one day anyway."

As to preparing for death, he says to the king, who is pleading for more time: "A well-filled hour is worth more than centuries and centuries of frivolity and neglect. Five minutes is enough, ten seconds of awareness. He's been give an hour: sixty minutes, three thousand six hundred seconds. He's lucky."

And when the king appeals to the spirits of suicides to help him learn to despise life, the doctor says, "I could prescribe mood-lifting or tranquillising pills."

When finally the dying king says that he would like some pot-au-feu, the doctor intervenes, saying, "Pot-au-feu is not recommended for the health of the dying."

Ionesco, who had no very high opinion of doctors and the pretensions of medicine, is telling us that, in the face of inevitable oblivion, medicine is futile, a displacement activity. Then, of course, so is everything else. It is man's tragedy, says Ionesco, that he knows that his life is futile, but cannot live as if it were.

I note, however, that he was buried according to the Romanian Orthodox rite.

Theodore Dalrymple is a writer and retired doctor

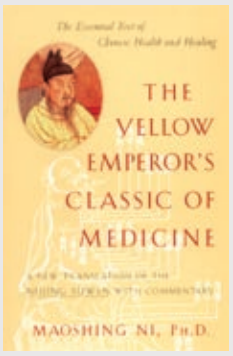
MEDICAL CLASSICS

The Yellow Emperor's Classic of Medicine

The *Huangdi Neijing* (given the title *The Yellow Emperor's Classic of Medicine* in one of the latest translations) is an ancient treatise on health and disease said to have been written by the famous Chinese emperor Huangdi around 2600 BC. However, Huangdi is a semi-mythical figure, and the book probably dates from later, around 300 BC, and may be a compilation of the writings of several authors. Whatever its origin, the book has proved influential as a reference work for practitioners of traditional Chinese medicine well into the modern era. The book takes the form of a discussion between Huangdi and his physician in which Huangdi inquires about the nature of health, disease, and treatment.

The ideas in the book have a basis in Taoist philosophy. The key to a long healthy life is to follow the Tao, the natural way of the universe. Health and illness are caused by an imbalance of the two basic forces, yin and yang, and by the influence of the five elements (water, fire, metal, wood, and earth) on the organs of the body. The organs themselves were thought to interact in ways that seem physiologically strange nowadays: the spleen "ruled" over the lungs, for example, and the lungs were connected with the skin. There was an understanding of the connection between the heart and the pulse but not in terms of circulation of the blood as understood today.

Diagnosis was mainly carried out by pulse taking, a complex process involving taking into account the time of day, season, and sex of the patient. Treatments included drugs, diet, acupuncture, and guiding the patient towards Tao.



Many of the book's ideas, particularly those relating to anatomy and physiology, would obviously seem primitive and outdated to modern readers but no more so than ideas from a similar time in Western medicine. The strength of the work, and possibly the reason for its widespread influence and its place even today not just as a reference source for those interested in traditional Chinese medicine, is that its basic ideas are still valid and of appeal to anyone interested in understanding more about the custom and practice of medicine. The *Huangdi Neijing* recognises that, for everyone, the processes of the body follow certain natural rules and that health and disease are influenced by natural ageing processes, as well as the environment. All this needs to be understood to ensure accurate diagnosis and specific treatment for a condition.

In terms of English translations, Ilza Veith's 1960s version is written in a straightforward style and has explanatory footnotes. More recent versions by contemporary practitioners of Chinese medicine, Maoshing Ti and Zhu Ming, are also available; these are more readable and truer to the spirit of traditional Chinese medicine.

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We welcome contributions and suggestions for our Medical Classics section. Please email Rebecca Coombes at rcoombes@bmjgroup.com