

A FOLLOW-UP OF A CASE OF DOCTOR HARVEY'S

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HONOUR SANS REPOSE

WILLIAM HARVEY recorded in *De Generatione Animalium* his famous observation of a young man whose chest wall was deficient, so that his heart could almost directly be palpated. Much information about the young man's life and death is available in the work of William Montgomery who was his cousin and brother-in-law. This note is to provide a collation of the two accounts, that of Hill (1869) being available to few.

Even Harveian orators have not known that the young man was Hugh Montgomery, of Newtownards, in the County of Down. He was the older son of Hugh, the second viscount Montgomery of the Great Ardes. His mother was Jean Alexander, daughter of Sir William Alexander, Secretary for Scotland. His grandfather, the first lord, originally sixth laird of Braidstane in the county of Ayr, was the celebrated planter of the Scottish colony in North Down in the neighbourhood of Newtownards, Donaghadee and Comber. This youth, says Harvey, "when a child had a severe fall attended with fracture of the ribs of the left side. The consequence of this was a suppurating abscess, which went on discharging abundantly for a long time, from an immense gap in his side". This Harvey learned "from himself and other credible persons who were witnesses". One of these credible persons may have been Doctor Patrick Maxwell, for it was he, so William Montgomery tells us, "who had made the orifice in his side when a boy at school and prescribed the lotion for it". This Doctor Patrick Maxwell had long lived in North Down, presumably at Newtownards, as "pensionary physician" to the first and second lords. In 1641-42, William Montgomery tells us, Maxwell was attending King Charles I as physician. About the end of 1641 young Hugh, then eighteen, who had been travelling in Europe, was called home because of the outbreak in October of the great Irish War. It is safe to assume that he would not pass through England without seeing the doctor who had attended him so long. William Montgomery says Maxwell "was glad to meet with Mr. Montgomery, of the Ardes, his quondam patient (as it is lately said), now in good plight of strength and health". It seems likely that Maxwell told the King of Hugh's remarkable disorder. Harvey says that the King, having learned of the circumstances as "something miraculous", sent Harvey himself "to wait on the young man and ascertain the true state of the case".

"And what did I find? A young man, well grown, of good complexion, and apparently possessed of an excellent constitution, so that I thought the whole story must be a fable. Having saluted him according to custom, however, and informed him of the King's express desire that I should wait upon him, he immediately showed me everything, and laid open his left side for my inspection, by removing a plate which he wore there by way of defence against accidental blows and other external injuries. I found a large open space in the chest, into which I could readily introduce three of my fingers and my thumb; which done, I straightway perceived a certain protuberant fleshy part, affected with an alternating extrusive

and intrusive movement ; this part I touched gently. Amazed with the novelty of such a state, I examined everything again and again, and when I had satisfied myself, I saw that it was a case of old and extensive ulcer, beyond the reach of art, but brought by a miracle to a kind of cure, the interior being invested with a membrane, and the edges protected with a tough skin. But the fleshy part (which I at first sight took for a mass of granulations, and others had always regarded as a portion of the lung), from its pulsating motions and the rhythm they observed with the pulse—when the fingers of one of my hands were applied to it, those of the other to the artery at the wrist—as well as from their discordance with the respiratory movements, I saw was no portion of the lung that I was handling, but the apex of the heart! covered over with a layer of fungous flesh by way of external defence, as commonly happens in old foul ulcers. The servant of this young man was in the habit daily of cleansing the cavity from its accumulated sordes by means of injections of tepid water ; after which the plate was applied, and, with this in its place, the young man felt adequate to any exercise or expedition, and, in short, he led a pleasant life in perfect safety. Instead of a verbal answer, therefore, I carried the young man himself to the King, that his majesty might with his own eyes behold this wonderful case: that, in a man alive and well, he might, without detriment to the individual, observe the movement of the heart, and, with his proper hand even touch the ventricles as they contracted. And his most excellent majesty, as well as myself, acknowledged that the heart was without the sense of touch ; for the youth never knew when we touched his heart, except by the sight or the sensation he had through the external integument. We also particularly observed the movements of the heart, viz.: that in the diastole it was retracted and withdrawn ; whilst in the systole it emerged and protruded ; and the systole of the heart took place at the moment the diastole or pulse in the wrist was perceived ; to conclude the heart struck the walls of the chest, and became prominent at the time it bounded upwards and underwent contraction on itself.”

William Montgomery says the King “had the curiosity to look at the palpitation of his heart which was plainly discernable at the incision which was made in his side ; ‘Sir,’ said the King, ‘I wish I could perceive the thoughts of some of my nobilities hearts as I have seen your heart,’ to which Mr. Montgomery readily replied, ‘I assure your majesty, before God here present and this company, it shall never entertain any thought against your concerns, but be always full of dutiful affection and steadfast resolution to serve your majesty.’ He stayed a few days at court, and the King had him in particular favour and here (I believe) was laid that unshaken foundation of loyalty whereon all his succeeding actions were built”.

Hugh hastened home to county Down. The strength of the closely settled Scottish colony in North Down made it one of the few semi-tranquil places in Ireland for the next ten years. The Irish army never penetrated there. But the boy was rarely to know tranquillity again. The second lord, who had raised a regiment of a thousand foot and five troops of horse, died in 1642, so that at nineteen Hugh became the third viscount and head of his people. Thereafter he was busy for eight years in the arms and counsels of the North, until in 1650 he perforce surrendered to the English parliament ; Cromwell’s victories having put an end to

the long and confused war. In June, 1646, he had commanded the horse at the second battle of Benburb, where a combined Scottish and English army was heavily defeated by Owen Roe O'Neill. Montgomery "warmly charging" and "coldly seconded" was captured, and imprisoned for some twenty months in the castle of Cloughoughter in a lake in county Cavan. "It impaired his health tho' he wanted not wholesome viviers". In February, 1648, he was released by being exchanged for the Earl of Westmeath and passing through the Anglo-Scottish lines reached Carrickfergus. In 1649 the Royalists and Presbyterians of the North combined against the English Commonwealth, and Montgomery received the King's commission to be general of all the forces in Ulster. He was energetic and had considerable success but, though he seized Carrickfergus and Coleraine, he failed, as might have been expected, to take Derry. His troops and people were not so royalist as himself. The great Owen Roe was formidable in south-west Ulster. Coote held Derry for the English Commonwealth. All came to an end with Cromwell's short sharp campaign.

The Commonwealth exiled Montgomery to Holland where he spent some lonely years. In 1651 he visited Leyden, seeing "an Atomy chamber". In Hunsterdyke he saw "a copper pan and a brass one in which a countess of Holland's birth were baptised, the males and the females separately, but at one time; the infants (in all) were three hundred and sixty-five". Perhaps the poor countess was delivered of a hydatidiform mole. In 1652 or 1653 the Commonwealth allowed him to return to Ireland. He was no more than thirty. He was joyfully united with his family and although he suffered inconvenience and indignity at the hands of the Commonwealth government in Dublin, and even was imprisoned in Kilkenny for a short time, he was no longer in serious political trouble. However, for the most part he had to remain in Dublin. His fortune was seriously diminished, and his debts increased. His health was not so good. He grew corpulent. When Henry Cromwell became ruler of Ireland in 1657, Montgomery's relations with the government became comparatively easy. It was at this time, when he came to Dublin to salute Henry Cromwell, that he "was taken with sickness, which did cast him into a deep palsy that seized all one side of him; and being lodged next house to Doctor Ffennell after many weeks his lordship recovered", though "melancholy".

The restoration of the King in 1660 improved Montgomery's fortunes. He was made a commissioner for putting into execution the King's declaration for the settlement of Ireland. He was made earl (Mount-Alexander) and a privy councillor. He became Master of the Ordinance and Military Stores in Ireland, and seemed to be in a fair way to improve his fortune and to pay his debts. He "lived in grandeur" in Dublin, "highly esteemed and respected by all, and for his ripe judgement appearing when he spoke in the House of Lords or at the Council Board". Yet his health was worse. "His lordship had fallen into a discentery, which lay sore upon him, changing its complexion twice or thrice. It was very dangerous, his body having grown unwieldy and bulksome; but by God's blessing (on Doctor Fennell's endeavours) he recovered and was but weakly well mended, for that flux had brought him low too suddenly, by evacuating a great abundance of humours and fatt by which he was become formerly uneasy to himself."

He had not long to live. Blood's plot took him to County Down, where he was able to do much for the government in settling the unrest, and for his people in

keeping them out of trouble. There "his drowsy distemper grew fast upon him, that in a fortnight he was much indisposed to write." At this time he got little business done, because of "the daily increase of his distemper which was plethorick; his liver was large and strong, and sent more blood to the heart than it could vent fast enough (for his heart was wissened and shrivelled to less than it should be (occasioned by defect of the plurae) to preserve which from corruption the lotion aforesaid was used every morning and at bedtime, by injection at the said orifice with seringe); and this surcharge of blood upon the heart caused the swimming and obfuscation in his brain (which in itself had no fault the abundance thereof) and made him drowsy every third and fourth hour. The first remedy was to let his veins often breath out part of that superfluous mass of rarified blood; but Primrose, the Belfast apothecary (who practised physic) understood not the matter, and was timorous to tamper in that case. Wherefore his lordship hastened back to Dublin and (by the way) died in his bed at Dromore, the fifteenth night of September, 1663: The next morning Dr. Gray (who had been sent for) averred that if his lordship had often been bled in several veins, and his blood sweetened and thickened, it had not gushed out (as it did divers times) at his nose, nor so oppressed his brain making it giddy and his eyes to be bemisted. This Dr. dis-embowelled him and embalmed him". He had died at forty years of age.

William Montgomery says he was "among the properest of middle-sized men, well shaped, of a rudy sanguine complexion; his hair had been reddish and curled . . . his eye grey and quick, and his countenance smiling and complacent, his arms and thighs sinewy and brawny". He was a kind good person, "the most regarded Scottish man in Ireland".

It is difficult to know if the original disease really was traumatic. If it was, it seems there was no open injury. Perhaps a haematoma became infected. If the history of the fall is only a rationalisation, the abscess may have been due to tuberculous or staphylococcal osteitis of a rib. It may more likely in that case have been staphylococcal. The transient hemiparesis may have been embolic, but the atria can hardly have been fibrillating when Harvey examined him, for he would surely have recorded irregularity of the ventricles. The only congestive failure was terminal. We know of no record of Dr. Gray's observations. His disembowelling gave him the opportunity to examine the heart, and perhaps William Montgomery's note that the heart was "wissened and shrivelled" was information obtained from Dr. Gray. It is hard to understand, unless there was a constrictive pericardial thickening. Perhaps we may hazard a diagnosis of staphylococcal osteitis of rib, with pericarditis, bone necrosis, surgical drainage and chronic open pericarditis, eventually constrictive.

Montgomery's social and political situation is interesting. His race was Scottish, his domicile was Irish. He "had no hatred or love solely for country sake; English, Scotts and Irish were welcome to him, yet he liked and esteemed the English most (both his Ladys being such)". In religion he was inclined to his mother's Presbyterianism in early life. In later life he adhered to the Episcopal Church. In early life he belonged to the patriarchal farming community in North Down. In later life he joined the governing circle in the field and in the capital. William Montgomery is probably right when he says that the early attachment to the King ruled his life-course. If so it was disastrous for Montgomery and his family. It

separated him in religion and politics from his tenants and dependents in North Down, and ensured him the enmity of the English Commonwealth. The estate could not but be maladministered during the troubled time. His debts grew, and after the Restoration the patronage of the King and his Irish government were a poor substitute for the revenues of the colony his grandfather had founded. By the end of the century most of the Montgomery estate was in other hands. It has to be remembered, however, that Montgomery's royalist sympathies were rooted in more than his kindly reception by King Charles I when he was eighteen. It was the King's Scottish father, James VI of Scotland and I of England, who had granted the territory in North Down to the first lord, and it was only because James VI of Scotland had become James I of England that it was possible for the Scots easily and legally to settle in Ireland. There until the union of the crowns they would have been the subjects of a foreign and sometimes hostile king. The Montgomery kinship's fortunes had grown with the fortunes of the Stuarts, and derived from their favour, and it is not to be supposed that a man like Montgomery would desert them when they were in trouble.

REFERENCES AND NOTES

Harvey, William. *De Generatione Animalium*, translated by Robert Willis, and printed in *The Works of William Harvey*. The Sydenham Society, 1847.

The Montgomery Manuscripts, compiled by William Montgomery of Rosemount, and edited by George Hill. Belfast. 1869. Archer and Sons.

Every Ulsterman must feel respectful gratitude to William Montgomery for his remarkable history of his time. The Manuscripts are a sufficient biography of the man and the scholar. Hill's edition is very important.

For a biographical note on George Hill, see McCleery, J., *The Nonsubscribing Presbyterian*, March, 1961, Number 652.

In some contemporary accounts of the Irish War of 1641 the third viscount is referred to as the Lord of Ardes.

Hill notes that the third viscount Montgomery was married firstly to Mary, daughter of Charles, second viscount Moore of Drogheda, and secondly to Catherine Jones, daughter of Arthur Jones, second viscount Ranelagh.

In the last sentence of Harvey's account the word "diastole" is used twice. On the first occasion it plainly means ventricular dilatation with relaxation. On the second occasion Harvey speaks of the "diastole in the wrist", and we may suppose he means the dilatation of the radial artery with ventricular systole. In the Hague edition of 1680 the passage reads . . . "ferique in corde systolen, quo tempore diastole in carpo percipiebatur". The words "or pulse" are a gloss, presumably of the translator's.

Harvey says that Hugh Montgomery "came to London". William Montgomery says that Hugh "kissed King Charles his hand at Oxford". The Irish war broke out on the 23rd of October, 1641, and then Hugh was called home from Europe. The King left London on the 10th of January, 1642, not to return until the time of his trial and execution in 1649 (though for some time he was not far away at Windsor). He did not settle in Oxford till the 29th of October, 1642, after Edgehill. However, William Montgomery says "Mr. Montgomery came home before Ao 1642 (as I think)". So London may be right. We have no precise date of Hugh's visit to the King.