The Man Whose Hands and Legs Rotted Off: A Seventeenth Century Case of Necrotizing Fasciitis.

Kevin Goodman Uploaded to <u>http://bowsbladesandbattles.tripod.com/id40.html</u> 19th February 2020.

In the final half of the seventeenth century John Duncalf, (son of Richard Duncalf of Codsall, near Wolverhampton), was an apprentice of Thomas Gibbons, a wheelwright of Kingswinford. Almost three years into his apprenticeship Duncalf and a fellow apprentice stole a large amount of iron from their master and delivered it to an accomplice who concealed it. However, they were caught.

Brought before Lord Ward of Dudley Castle¹ they first accused each other, then finally confessed to stealing "26 pounds of old iron, besides more that was wrought up, new wagon-nails, Ends of Bars etc" (Illingworth 1677²). They were found guilty on October 14th 1675 and were sent to prison. However Duncalf's accomplice became dangerously sick and "this John Duncalf pretending at least to be sick also, they two were set at liberty the week following" (Illingworth 1677).

Upon his release Duncalf vowed he would never set foot in Kingswinford again while he lived. He also refused to return to his former apprenticeship and paid his master forty shillings in exchange for a release.

Soon after he began to engage in: *"licentious courses"* which included, according to Illingworth (1677):

"idleness, stealing, lying, cursing, swearing, drunkenness, and uncleaness with women... by lascivious words and gestures, whereby he had endeavoured to tempt them to lewdness in divers places...he had committed a rape upon a young person and afterwards murdered her. That he was guilty of buggery and lying with beasts, etc."

It cannot be discounted that in describing Duncalf's crimes, Illingworth may have engaged in some embellishment.

On January 6th 1676, Duncalf visited the house of Humphrey Babb at Grange Mill, three miles from Wolverhampton. Babb was out, but he begged from Margaret, Babb's wife, some food and drink. While she fetched them he stole her bible, which he later sold for three shillings to a maid of John Downings, who lived at Heath Forge, near Babb's house.

When he was apprehended, he fiercely denied stealing the bible "wishing his hands might rot off if it were true" (Illingworth 1677).

¹ Edward Ward, 7th Baron Dudley, 2nd Baron Ward 1631-1701

 $^{^{2}}$ Rev. J.A.Illingwoth (d.1693) , a non-conformist minister who was living at Prestwood at this time claimed to be a witness to the events (Guttery 1956)

According to Illingworth, within a few days Duncalf began to experience violent trembling and he feared he had an ague (fever). His flesh began to look black at the wrists of his hands. The flesh then began to rise in great lumps at his wrists and knees.

In a pitiful state, he was discovered in a barn³, his shirt and doublet filled with lice and fleas. He was moved to lodgings at the home of John Bennet in Wall Heath.

Soon, the lumps began to burst and seep. The flesh began to shrink from the bones at those places: "and putrid matter came out and run abundantly causing exquisite pain and torment to this poor man and so offensive was the smell for several weeks".

To Illingworth, word of his condition spread and he began to receive many visitors to view his state. "*thousands*" came to witness his punishment from God - some from afar as London and Paris. However, due to the stench the visitors "were not able to abide in the room with him, nor stand near without the door except they had herbs or other things at their mouths and noses to smell to".

By May 8th both his legs had fallen off at the knees and his right hand was hanging by a piece of ligament; with a little touch of a knife the hand was taken off. The other hand was described as being black as a shoe and hard and rough and hung on for some time until he requested it be cut off. His flesh began to waste and his spirits to fail. He died on June 21st repenting his sins and asking God to forgive him.

The problems with such retrospective diagnosis⁴ are apparent: relying on second hand - and less than objective - information from over three hundred years ago and no tissue to allow detailed investigation. However, many of Duncalf's symptoms do appear to be consistent with Necrotising Fasciitis, a streptococcal infection popularly known as a flesh eating disease in which copious amount of foul-smelling pus are typically produced.

This condition was first described by the ancient Greek physician Hippocrates (circa 500 BC), when he wrote:

"Sometimes a very small wound broke out and if such an accident was neglected great inflammation took place. In most of them the abscess ended in suppuration and there was great failing off of the flesh, tendons and bones; and the defluxion which seated in the parts was not like pus, but a sort of putrefaction and the running was large and of various characters. About the head these things were accompanied by falling off of the hairs of the head and chin; the bones were laid bare and separated and there were excessive running; and these symptoms happened in fevers and without fevers" (Adams 1785; Descamps et al 1994).

³The barn where Duncalf was discovered may have been in the vicinity of Stallings Lane, Kingswinford. According to Hitchmough (2010) there was a solitary farm, known as Duncalf's Barn in this area.

⁴Retrospective Diagnosis: "a procedure aiming to identify an individual case of illness or a disease in history by a modern name or diagnostic category still unknown to the physicians of the time". (p141 Karenberg 2009)

It was described in the late eighteenth century by Claude Pouteau, chief surgeon in the Hotel Dieu in Lyon in 1783. During this time it was described by many names: *malignant ulcer*; *gangrenous ulcer*; *phagedenis ulcer*; *putrid ulcer* and *phagedena gangraenosa* (Blackadder 1818). In the eighteenth and nineteenth centuries it was referred to as *hospital gangrene* by British Naval surgeons (Travers 1824). The disease was recorded in the Gendarmerie Hospital at Brussels following the battle of Waterloo in 1814 (Travers 1824) and Florence Nightingale noted 80 cases in one month at Scutari barrack hospital during the Crimean war (McDonald 2010). The disease was also well known to the surgeons in the American Civil War, and the Confederate Army surgeon Joseph Jones is credited with providing the first clear investigation and characterization of hospital gangrene (Jones 1871). In 1952, Wilson coined the name *necrotizing fasciitis* (Wilson 1952).

Today, treatment includes antibiotics, surgical debridement (removal of skin, tissue, and muscle) and, in extreme cases, amputation. However, mortality rates are high and patients can die days or weeks after the infection, (Lingaraj et al 2010; Sadasivan et al 2013).

Necrotising Fasciitis results when puncture wounds or lacerations (including incisions as a result of surgery) become contaminated (Lambade et al 2012, Sadasivan et al 2013). While it is unknown whether Duncalf had suffered any lacerations, when found in the barn he was dirty and his clothes infested with lice and fleas. Thus infected flea bites could have lead to the infection (Puvanendran et al 2009).

The person experiences intense pain; feels extremely ill and develops a high fever. The affected tissue becomes red, hot and swollen; rapidly becoming discoloured and turning violet. It often accompanied by the development of large fluid-filled blisters. The fluid from these blisters is brown, watery, and can be foul smelling, (at this stage, the tissue – which is dying - is undergoing rapid and progressive liquefaction), and tissue such as muscles and tendons are visible. As the tissue dies the nerves stop working and the area loses sensation. Eventually the dead tissue turns black as gangrene sets in (Lambade et al 2012, Sadasivan et al 2013).

Without treatment death is certain.

Duncalf may have suffered a rare complication of Necrotising Fasciitis known as *multi-focal*: it manifested in more than one part of his body, in this case his limbs. (Lee et al 2016).

Given the horrific symptoms of such a condition, and with no other explanations for its cause, it is not surprising that its genesis was attributed to God.

A similar case, but with less details of the symptoms, is described in *A* circumstantial and authentic account of the memorable case of Richard Parsons, as transmitted in a letter from William Dallaway, Esq.; High Sheriff of Gloucestershire, to his friend in London. (p191 The Annual Register 1766). Richard Parsons, during a crooked game of cards declared: 'that he might never enter the kingdom of heaven, and that his flesh might rot upon his bones, if [the cards] were not fix in game.'(p.191). the next morning Parsons complained of a bad pain in his leg, which

increased in intensity. There was also an appearance of a swelling, and afterwards the colour changed to that of a "*mortified slate*."

Adams F.(1785) The genuine work of Hippocrates. *London Medical Journal* 6: 373-400.

Blackadder H.H.(1818) *Observations on phagedena gangraenosa*. Edinburgh. David Brown.

Descamps V, Aitken J, Lee M. (1994) Hippocrates on necrotizing fasciitis. *The Lancet 344*: 556.

Gurk MM (2003) Diagnosis and treatment of necrotizing fasciitis in the head and neck region. *Oral and maxillofacial surgical clinics of North America* 15: 59-67.

Guttery, D.R. (1956) *The prentice and the Parson: A chapter fron the History of Kingswinford*. Brierley Hill; Libraries and Arts Committee.

Hitchmough, T. (2010) Hitchmough's Black Country Pubs: Kingswinford.

Illingworth, James: "A Genuine Account Of The Man Whose Hands And Legs Rotted Off In The Parish Of Kingswinford in Staffordshire; Where He Died, June 21, 1677"

Jones J. (1871) Surgical memoirs of the war of the rebellion: investigation upon the nature, causes, and treatment of hospital gangrene as prevailed in the Confederate armies 1861-1865. In: US Sanitary Commission. New York.

Karenberg, A. (2009) Retrospective Diagnosis: Use and Abuse in Medical Historiography. *Prague Medical Report 110 (2)*, 140–145.

Lee, C.; Li, Y; Huang, T., Huang, T; Hsu1, W.; Tsai, Y.; Huang, J. and Huang, K. (2016) Synchronous multifocal necrotizing fasciitis prognostic factors: a retrospective case series study in a single center. *Infection*,44:757–763.

Lingaraj J., Sanjay R., Kotrashetti S.M., Chintan N. (2010) Necrotizing cervical fasciitis: a case report and review of literature. *Journal of Maxillofacial Oral Surgery* 9(1):54-56

McDonald, L.(ed) (2010) Florence Nightingale: The Crimean War: The Collected Works of Florence Nightingale (Vol 14) Wilfred Lavrier, University Press.

Puvanendran, R.; Chan Meng Huey, J. and Pasupathy, S. (2009) Necrotizing Fasciitis. *Canadian Family Physician*. Vol 55: October. 981-7.

Sadasivan, J., Kishore Maroju, N., and Balasubramaniam A. (2013) Necrotizing Fasciitis. *Indian Journal of Plastic Surgery*. *46*(*3*): 472–478.

The Annual Register or a view of the history, politics and Literature for the year 1766.

Travers T (1824) Two cases of slough ulceration. *The London Medical and Physical Journal* 1824: 122-134.

Wilson B. (1952) Necrotizing fasciitis. American Surgery: 18: 416-431.