

Curiositas

MEDICAL STUDENT QUIZ



A 64 year old man presented to his general practitioner with a painful right great toe. What is the differential diagnosis, and the most likely diagnosis? How would you investigate him, and how should the acute phase of this condition be treated?

Dr Paul Hamilton (Specialty Registrar, Chemical Pathology, Belfast Health and Social Care Trust) and Dr Gerry Gormley (Senior Academic General Practitioner, Centre for Medical Education, Queen's University Belfast, Northern Ireland.) The patient kindly gave permission for use of this image.

GENERAL PRACTICE QUIZ

A right handed 'Fettler' presented to his family doctor with intermittent episodes of tingling, numbness and coolness in some of his fingers. On occasions he noticed self-limiting episodes when some of his fingers would become pale compared to the rest of his hand. He was able to capture one of these episodes with his smart phone camera. What is the most likely diagnosis?



Dr Gerry Gormley, Senior Academic General Practitioner, Centre for Medical Education, Queen's University Belfast, Northern Ireland. (The patient kindly gave permission for use of image in this article)

HISTORICAL QUIZ

Curiositas was intrigued to discover a physician's handbook, used by a Co Tyrone doctor in 1911, entitled 'Wellcome's Medical Diary'.

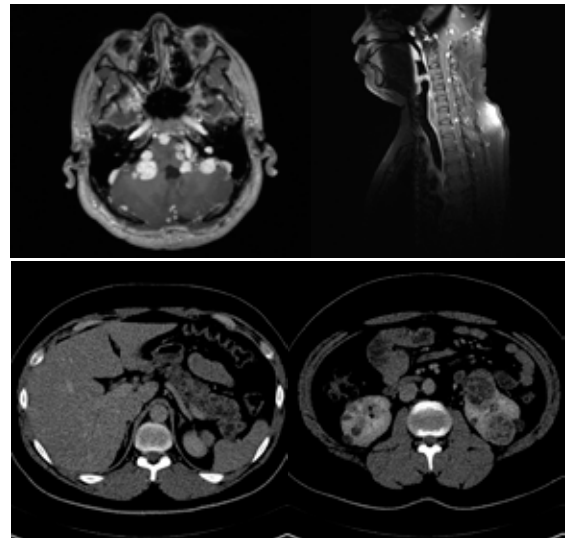
What condition do you think this concoction of chemicals and potions was used to treat?

Of course it goes without saying – we would not recommend using these chemicals in current clinical practice – we have moved on considerably in the last 100 years!



POSTGRADUATE QUIZ

This 26 year old man presented to the neurosurgical department with modest posterior fossa symptomatology. He had no known family history. What abnormalities are present on these MRI and CT studies and what is the unifying diagnosis?



Dr Ian Bickle, Consultant Radiologist, Raja Isteri Penigran Anak Saleha Hospital, Bandar seri Begawan, Brunei Darussalam.

AND FINALLY.....

This solitary tree, on the perimeter of a construction site was brought to Curiositas's attention.



Do you know where this tree is? What is its local and global historical medical significance?

MEDICAL STUDENT SUBEDITOR INTERNSHIP
 Curiositas is looking for a medical student to join the Curiositas Editorial team. This internship will be, in the first instance, for 1 year. The role will involve contributing to the production of the Curiositas section.
 For further information on the post and the application process please email Dr Ian Bickle at firbeckkona@gmail.com. Applications for this post will be accepted up until the 14th October 2014.

ANSWERS See overleaf.

CONSIDER CONTRIBUTING TO CURIOSITAS?
 Please refer to 'Curiositas: Guidelines for contributors' <http://www.ums.ac.uk/curiositas.html> and email curiositas@ums.ac.uk with your ideas and submissions

Book Case

Dr John Purvis
6 favourites from my bookshelf.

THE AGE OF WONDER

Richard Holmes (Harper Collins, 2008).

Holmes explores the relationship between the Arts and Science through the eyes of Joseph Banks. Banks began his scientific career as botanist on Captain Cook's expedition to Tahiti (a somewhat erotic journey) and rose to become President of the Royal Society where he nurtured the blossoming careers of William and Caroline Herschel and Humphrey Davy. The Romantic poets and authors of those days were fascinated by "natural philosophy" as science was then known – Coleridge and Davy got high on nitrous oxide together whilst Mary Shelley wrote "Frankenstein – the Modern Prometheus" in response to experiments on "galvanism". A fascinating book.



THE COMPLETE GUIDE TO THE HERSCHEL OBJECTS

Mark Bratton (Cambridge, 2011).

William Herschel started his working life as a composer (CDs and MP3s still available) but as 18th Century gentlefolk often did, turned to something else. He devoted his life to astronomy and became famous for discovering Uranus (Uranus was father of Saturn who was father of Jupiter). With Royal backing, he built enormous telescopes and began systematically imaging the heavens. His



sister, Caroline, specialised in comet hunting and possibly was the first female to have solo letters published in the *Transactions of the Royal Society*. This beautifully detailed book lists each of the 2500 or so, galaxies, star clusters and planetary nebulae that they documented. An invaluable resource for modern day amateurs looking for something more challenging than Charles Messier's list.

THIS GAME OF GHOSTS

Joe Simpson (Vintage, 1994)

I'm not a climber but I enjoy reading books about it and this is one of the best. It's an autobiography of Joe Simpson – his previous book "Touching the Void" detailed how he survived when his friend deliberately cut Joe's rope in atrocious conditions in the Andes. Joe crawled back to base camp with severe injuries.

This is more of an insight into the psyche of climbers and the strange camaraderie they develop. Death stalks this book – as well as a fierce need for the high places. If you treat extreme sportsmen or the military and find it difficult to understand why they put their lives on the line then this may help.

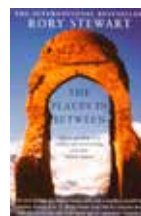


THE PLACES IN BETWEEN

Rory Stewart (Picador, 2004)

I first came across Rory when he narrated a TV documentary on the life of T.E. Lawrence – it was clear that this was someone with the deepest knowledge and respect for the East and appreciation of the acute sense of mistrust engendered by the West's past mistakes.

This book documents Rory's walk across Afghanistan in 2002 accompanied only by a stray dog. He encounters nobility and generosity as well



as suspicion and warlords who would do anything to maintain their grip on their people. Only his ability to speak local languages and knowledge of Eastern culture keeps him alive. Rory is a politician now with a special brief for foreign affairs, perhaps one of the few who has first-hand knowledge of what he is talking about.

ANGELMAKER

Nick Harkaway (Heinemann, 2012)

I enjoy a good adventure story. This is set in modern London but is haunted by unresolved secrets from the past. There is much about old family trades such as watchmakers and undertakers. An interesting fact – Undertakers like to hire people who have the "acquaintance" – a familiarity with death – so Doctors, Nurses and Police are apparently ideal.

Nick is the son of author John Le Carré and this is his second novel. He has also written a book about what it means to be human in a digital world which leads me on to...



CONSIDER PHLEBAS

Iain M Banks (Orbit, 1988).

Can machines be petulant, spiteful and funny? Back in 1988, Iain was already famous as author of "The Wasp Factory". This was his first foray into science fiction and introduced us to a utopian galaxy of intelligent spaceships, wickedly sarcastic drones and enhanced human bodies that could release tailored hormones to promote any mood or body adaptation required. A dark sense of humour and sparse prose makes this a delight. Iain passed away in 2013 and will be sadly missed.



Curiositas: Answers

MEDICAL STUDENT QUIZ

The differential diagnosis would include crystal arthropathy (gout or pseudogout), septic arthritis or haemarthrosis. The site involved in this case is particularly typical of gout, and this would be the most likely diagnosis. In the presence of a typical history and examination, and in the absence of evidence to suggest another diagnosis (e.g. joint trauma or features of infection), gout at this site is often diagnosed on clinical grounds alone. Detailed investigation might include an x-ray of the joint, aspiration of fluid with subsequent fluid microscopy (including polarised light examination) and culture, and blood tests (full white blood count, C-reactive protein, uric acid level and coagulation screen). Drugs to be considered for an acute flare of gout include non-steroidal anti-inflammatory drugs, colchicine and corticosteroids.

GENERAL PRACTICE QUIZ

The patient most likely has Vibration White Finger (VWF). 'Fettling' is the skill of removing excess moulding material from a cast component – typically using grinding power tools. The risk of developing VWF increases with the duration and intensity of exposure to vibration. Such patients need to ensure that they keep their hands warm, stop smoking and make appropriate work place changes in order to reduce or cease exposure to vibrating tools.

HISTORICAL QUIZ

The condition was Pneumonia. In this 'pre-antibiotic' era Curiositas was particularly bemused to see the use of Leeches, Alcohol, Strychnine and Liquorice in the treatment of this condition. With increasing antibiotic resistance, Curiositas wonders what might we be using in the next 100 years?

(Extract from 'Wellcome's Medical Diary, 1911' reproduced with kind permission from the Wellcome Library, London)



POSTGRADUATE QUIZ

The MRI brain and spinal cord studies demonstrate numerous small avidly enhancing lesions, which are most pronounced in the posterior fossa. These lesions are haemangioblastomas, albeit not the classical appearance of a cyst with an enhancing mural nodule. The CT study of the abdomen demonstrates; pancreatic cysts, renal cysts and an enhancing cortical based mass in the lower pole of the left kidney, in keeping with a renal cell carcinoma. The later was confirmed on image guided biopsy. This correlation of findings is in keeping with Von Hippel Lindau disease – an autosomal dominant multisystem disorder.

AND FINALLY.....

This is an Oriental Plane (*Platanus Orientalis*) tree, which is planted near to Erskine house, on the Belfast City Hospital site. Professor Dimitrios Oreopoulos brought seeds from the Plane tree of Kos, and saplings from these seeds were planted across the Belfast City Hospital site in 1969. The Plane Tree of Kos is best known to the medical profession as the tree on the Aegean island of Kos, under which Hippocrates, the 'father of medicine', reputedly sat to consult and teach in the 5th Century. Professor Dimitrios Oreopoulos moved to Canada from Northern Ireland, where he became Professor of Nephrology at Toronto, gaining international fame for his development of continuous ambulatory peritoneal dialysis. For further information on this interesting story Dr James Douglas wrote an article in the UMJ (*Douglas J, Dimitrios Oreopoulos, the Plane Tree of Kos and the Belfast City Hospital. Ulster Med J 2014;83(1):31-36*). To read this article follow this link: [http://www.ums.ac.uk/umj083/083\(1\)031.pdf](http://www.ums.ac.uk/umj083/083(1)031.pdf)

The 'Erskine House' Plane Tree of Kos (Belfast City Hospital) and Dr James Douglas (Retired Consultant Nephrologist, Belfast City Hospital) author of the the article 'Dimitrios Oreopoulos, the Plane Tree of Kos and the Belfast City Hospital. Ulster Med J 2014;83(1):31-36. (The author kindly gave permission for use of this image)

