## Tattersall's TALES

## Fasting, purgation, autointoxication and diabetes



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Today's diabetes world is fastmoving and exciting; knowledge is accumulating at an astonishing rate. To help understand the present, however, it sometimes helps to examine the past. In this installment of Tattersall's Tales,
Robert Tattersall explores the history behind
"autointoxication" of the bowel as a result of
constipation, the antiquated perceptions of its
links with diabetes, and the use of fasting and
purgation as a way of treatment.

recently picked up a copy of *The Daily Telegraph* (Anon, 2009) in which I found a quarter page advertisement for a book called "*Internal Health: The key to Eternal Youth and Vitality*". Inter alia it contained the following:

"Look at it this way, if you carry poisons in your bowel they must seep into your bloodstream... Your blood goes to every part of your body, including the brain... How can anyone think clearly if the blood feeding their brain contains waste which should be in the sewer?" [emphasis in the original]

This is merely the latest incarnation of a long tradition that constipation leads to the absorption of toxic substances from the "cess pool" that forms in the intestine, so called "autointoxication" (Whorton, 2000). In the 1820s, the French psychiatrist Jean Esquirol (1772–1840) advised vigorous purgation for mentally ill patients ("copro-psychiatry") and in the early 20th century the American psychiatrist Henry Cotton advised pulling out the teeth and removing the large bowel to cure madness (Scull, 2005). It was not only the mad who were subjected to such treatments. The French King Louis XIII (1601–1643) had 212 enemas, 215 purges and 47 bleedings in 1 year, and his successor Louis XIV (1638–1715) had several thousand intestinal douches during his life. Two 19th century surgeons, John Harvey Kellogg (1852–1943) and William Arbuthnot Lane (1856–1943), made fortunes out of the colon (Dally, 1996).

Kellogg was a conventional surgeon who did more than 22 000 operations during his 67-year career. We remember him today for "All Bran" but to contemporaries he was famous for the sanitarium (a word that he coined) he founded in Battle Creek, Michigan, where the rich and famous flocked to have their colons cleaned with his enema machine. After this a healthy intestinal flora was re-established with a pint of yoghurt, half of which was eaten and the other half given as an enema.

William Arbuthnot Lane who led the army medical service during World War 1 became obsessed by the idea that chronic constipation and autointoxication was the cause of a myriad ills in rich women and to cure it removed the colons of more than 1000. In his 1913 *British Medical Journal* article he listed 17 consequences of autointoxication, which covered virtually every minor and major ailment of humankind (Lane, 1913). Number 15 was about the damaging effects on the pancreas:

"The pancreas becomes infected directly by extension from the stagnating contents of the duodenum. This results in chronic induration, inflammation, and, finally, cancer of this organ. Pancreatic diabetes may also ensue."

At this time Lane's views were relatively orthodox, so that in 1913 a meeting on autointoxication at The Royal Society of Medicine lasted 6 evenings, involved 60 speakers and, when published, covered 380 pages (Champneys, 1913).

Lane was pilloried in Bernard Shaw's *The Doctor's Dilemma* and by the mid-1920s decided that operations were not, after all, necessary. He founded an organisation called The New Health Society, which aimed to combat constipation and promoted fruit, vegetables and exercise as the basis of healthy living.

Most histories of diabetes give a prominent place to the socalled starvation treatment introduced by the maverick American physician, Frederick Madison Allen. Yet Allen's friend Joslin credited a French physician Guillaume Guelpa (1850–1930) as the real originator of fasting in diabetes. Guelpa, who was born in Italy but spent most of his working life in Paris, was famous and/or notorious in his day but is now so completely forgotten that I have been unable to find an obituary.

Guelpa claimed to have been influenced by the work of Dr Georges Dujardin-Beaumetz (1833—1895) who found that those patients with typhoid who lost the most weight had the best prognosis. Guelpa introduced his treatment for diabetes in 1896 when he showed that fasting and saline enemas got rid of glycosuria in 3 days. He attributed this to the elimination of waste products and toxins (Guelpa, 1910a).

In 1910 Guelpa spoke at a meeting of the British Medical Association in London where he expanded on his work on diabetes. He claimed that: emaciation enabled the body to remove toxins more rapidly; that weakness was not a manifestation of deficient nutrition but of imperfect removal of toxins; and that hunger was not an expression of the needs of the body for repair of waste, but was a measure of the degree of intoxication in the digestive system. He ended by saying that his method of treatment was never harmful, that it was nearly always useful, and that sometimes gave truly marvellous results (Guelpa, 1910b).

Speaking to the French Vegetarian Society in 1911, he enumerated the elements of his cure of diabetes, which

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were: (1) a vegetarian diet with no meat, eggs or alcoholic drinks, and (2) regular fasts and purges. The maintenance diet was nearly identical to that which Allen later popularised and consisted of:

- Breakfast: one fruit and a cup of coffee.
- Lunch: green vegetables, salad,
   30 grammes of bread and a fruit.
- Dinner: Julienne soup, one green vegetable,
   30 grammes of bread, one fruit.
- Unlimited soft drinks.

In the same lecture, he described his own experience with fasting. On a voyage from Morocco in 1907 he ate his last meal on 27 June and then took a purgative lemonade (a mixture of magnesium carbonate and citric acid). Five days later he arrived in Paris having eaten nothing en route but having had another purge when he reached Madrid. The overland trip from Madrid to Paris was undertaken in the full heat of summer but, unlike his fellow passengers, he did not sweat or have to drink constantly. He described this as a beautiful demonstration of the benefits and feeling of wellbeing from fasting.

He collated his experience in a book, *Autointoxication et désintoxication* (Guelpa, 1910c), a large part of which was devoted to refuting the many objections that had been made about his work. With the benefit of hindsight one obvious problem was that *La Méthode Guelpa* (the title of another of his books) was presented as a panacea that cured a spectrum of diseases from asthma, epilepsy and migraine to eczema, psychiatric diseases and various eye conditions. It even seems to have been the prototype of the "detox" which fills the Sunday colour supplements today (Guelpa, 1911–1912).

In 1921 Guelpa was invited to lecture at the Royal Society of Medicine when, according to the reporter from the *British Medical Journal*, "he found that success, especially in grave asthenic cases [of diabetes], followed upon vigorous and fearless purgation accompanied by periods of fasting lasting for 1–6 days" (Anon, 1921). He attributed the partial failure of his methods on the other side of the Atlantic – most of his supporters were in France and England – to the fact that fasting was not accompanied by purging.

The Bart's diabetes specialist George Graham regarded Guelpa's work as brilliant but ill-balanced and making exaggerated claims.

Some of his case histories were certainly fantastic. For example, he described a

country doctor who, after having one of his legs amputated, got diabetic gangrene in the other. Disintoxication resulted in recovery and he was able to continue to use the limb.

Another case was a dignitary in the Roman Catholic church who had "swelling and ankylosis in his joints" from gout, so that for 6 months he was unable to kneel to celebrate mass. On the twelfth day of treatment, having had two periods of starvation and purging of 4 days each, he was able to kneel!

The final case of which, according to the report, "he showed illustrations", was a 72-year-old man, dyspnoeic on the least movement, who had an enormous aneurysm (presumably syphilitic) of the arch of the aorta, 13.5 cm in diameter. After 3 months of fasting and purging he had lost 15 kg in weight, the aneurysm had diminished to about 8 cm and "he was today in a satisfactory state of health".

At the end of the meeting the St Mary's physician Sir William Wilcox (1870–1941), best remembered for his work on criminal cases involving poisoning, said that Guelpa had "scarcely received in this country the praise which was his due as the father of one of the greatest advances in modern medicine". His lack of recognition may have been because he only wrote and published in French journals. He was certainly not backward in self-promotion.

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