



## Serendipity

In the 18<sup>th</sup> century, as you well remember, Sir Horace Walpole coined the term “serendipity” for accidental discoveries. He had come across a fairy tale of the three princes of Serendip (which was the old name for Sri Lanka). They set off to travel the world and rarely found the treasures they were looking for but, by accident, came across equally happy discoveries.

Accidental discoveries have always played an important part in medicine, especially in the discovery of drugs. The legendary discovery of penicillin by Sir Alexander Fleming is well known but what is not so well known is that many other drugs, such as aspirin, nitroglycerine, pethidine, prednisone, sulphonamides, nitrous oxide and warfarin, were all discovered by accident. Warfarin, for example, was discovered after cattle bled to death after being fed mouldy hay.

Viagra is perhaps the most recent drug found by chance. It was used for the research of the treatment of heart disease and, at the end of the trials, the male patients apparently did not want to hand the left-over pills back to the investigators. This first trial took place in Wales and they have hardly won a game of rugby since. On further enquiry, the patients revealed an interesting “side effect” of the pills and hence this use of Viagra was discovered. Perhaps this is why Frank Muir explained serendipity as “looking for a needle in a haystack and finding the farmer’s daughter”.

I have had a couple of unintended fortunate results with patients. A patient attended with a high uric acid and he kept on having attacks of acute gout in his big toe, so I decided to give him a course of allopurinol. After two weeks on the drug, he returned to tell me that his long-standing psoriasis had cleared up almost overnight and he attributed this to the allopurinol. He thought I was the most marvellous doctor and I basked accordingly in the glory. (It rarely happens and I take it when I can).

Another patient, who was a woman of about sixty years of age, had been wheezing with asthma for about a week and not responding to bronchodilators, so I put her on an oral cortisone course. On her return five days later, her asthma was better and she said so were the terrible aching pains she had had across her shoulders and hips. With incredible clinical acumen, I realised I had treated her undiagnosed polymyalgia rheumatica. Again, one takes all the credit and exits modestly to stage right.

Medicines can give you some paradoxical results and we have all, at times, wondered about the power of suggestion over the actual action of a drug. If the prescribing doctor gives a patient an antidepressant and tells her that the depression will lift within two weeks, it must be one of the most powerful suggestive forces. It would be interesting to measure the degree of trust that the patient has in the doctor against the outcome. When the doctor gives more detail of the ritual of how to take the tablets and when to return for a follow up, it must emphasise the suggestion and improve the patient’s confidence and the outcome of the condition.

There is also that unknown factor of the doctor’s own belief in the drug. Beliefs, quality of interaction and connectedness (the synchronous index) must all play a part in the actions and reactions to drugs beyond their pharmacological actions. The time cycle of the illness is also a factor. We usually never know at what stage, and how far developed, many illnesses are in their natural evolution when we see and prescribe for the patient. They may be just starting, be well-established or be on the upward part of the recovery curve and already getting better when we intervene.

Apart from the patient’s trust in the doctor and the doctor-patient relationship, there is also the individual patient’s own belief in the efficacy of certain medicines. I once did a house call to an elderly pensioner who lived in the village with his daughter. He had a room at the back of the house with an old wooden wardrobe in it with his suitcases on the top of it. All his collected memorabilia filled the room.

I can’t actually remember why I was called to see him, but do remember at the end of the visit he produced a bottle of Stemetil syrup, which I had given him long ago for nausea. “Doctor Chris”, he asked, “could you give me another bottle of this cough mixture? It is really good for my cough although it does make me a bit nauseous”.

So where do you go from there?

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