Medical History

A link with the past

D McCracken

I qualified in 1942 and can look back over a career extending from the preantibiotic era. I saw the practice of medicine change "before my very eyes," as Arthur Askey used to say in those war years. Going back just one generation, and through the eyes of my father, I had a glimpse of what is now history. My father had seen Louis Pasteur in the flesh. The story is best told in his own words—in a letter written nearly 70 years later to a young friend who had asked him about the occasion. My father's memory is faulty in that the year was actually 1894 when he was 13 years old.

June, 1962

Dear Elizabeth:

Greetings. Dorothy tells me you want a story of a dog bite. I think it was in the Autumn of 1892 or 1893. We were a family of seven children living with father and mother on a farm about six miles south of Coleraine, County Londonderry. I was 11. Brother John, who comes into the story, was 7. Our dog, which was a good cattle dog, had been missing for three days. Early in the morning John and I went to fetch some calves from a field to their morning drink of gruel and milk. The dog generally assisted. We called his name, which the calves would associate with their drink. They came at the call. The dog came also, to our surprise and pleasure. We petted him by way of welcome. To get more petting he jumped to put his paws near to our faces. Apparently by accident, he scratched John on the nose. He scratched my wrist similarly. He followed us indoors. When my father was told he seemed unduly worried. We didn't know there was any rabies in the country, but I think he had heard rumours about an alleged case.

After breakfast we were sent to our doctor, about two miles away, to have the slight wounds cauterised. The doctor cauterised the wounds, but said it was too late to do any good. He also said that he was quite sure the dog was not mad. We were in the charge of an elder brother, Robert. When we came home Robert enlarged on the doctor's opinion that the dog was not mad (but skimmed over his opinion that if he were mad our wounds were probably more dangerous than a bite would have been). I knew he was misrepresenting a little to comfort our parents. Neither he nor we guessed that anything further could be done, whether the dog had rabies or not. My father's anxiety increased during the next two days, and he took us to a more distant doctor whom he had known and trusted for many years. This second doctor agreed roughly with the other, but emphasised that the scratches were more dangerous than a bleeding wound. In the meantime the dog had been shot and his body buried. The second doctor advised a post-mortem examination. This was immediately arranged.

There was a special service at our church that day. John and I with others of the family went. When we came home our own

horse and trap was standing at the door ready for the road. We were told, "Hurry up and have your dinner, which is ready for you. You have to catch the 4 pm train in Coleraine on your way to Paris." We caught the night boat from Belfast to Fleetwood. We had a sister living in London. She had been asked by telegram to meet us at Euston. We spent a couple of hours with her and the family with whom she lodged. She took us to the station for the train to catch the Dover-Calais steamer. We went early to leave time for inquiries at the station. A railway official was extremely kind and helpful. Among other things, he took our sovereigns to a bank and exchanged them for French money.

We had an uneventful journey to Paris. We landed there in the early morning, without any addresses whatever, or any knowledge of French. Father took us to the station restaurant and ordered tea. After a good deal of gesticulation it was supplied. We asked, in English, for the Pasteur Institute. The words, "Pasteur Institute," explained our presence and our needs. Some kindly person (we had a little audience by that time) fetched a taxicab driver who could speak English. He said, "I is English, I will take you to where you want to go." He took us to a hotel near the institute. Of the proprietor and all the staff, only the first mentioned could speak or understand English. He had acquired a working knowledge of it while serving in India. We were given breakfast in the dining room among a number of men in white smocks—a basin of coffee and a roll. Our bedroom was excellent, roomy, and furnished as a bed-sitting room.

At 1 pm we walked into the institute. We were taken to the official interpreters. She said she came from County Antrim, that she also kept a hotel and catered specially for British people. She had then staying in it four or five Irish people and a number of English people, and she invited us to go with her. After we had seen the doctor and had our injections, she took us home with her. Being young and innocent, I asked father to go with her. We went to the original hotel after lunch to collect our baggage. Our room was locked. The proprietor's wife treated us to a passionate, bitter, and red-faced harangue, of which we did not understand a word. The proprietor was, deliberately I think, absent. Father put down on the counter the agreed payment for a day's board and lodging. After much talking and delay we were given our luggage. The explanation of the trouble is that our new landlady, taking advantage of her position in the institute, was in the habit of stealing the British customers from the first hotel. They had been fighting over it so bitterly and noisily that our original landlord had been forbidden to go to the institute.

That is a digression. To go back to the story, there were about 60 patients at the institute. After examination by a number of doctors, we were given our injections. I was told to come daily at 11 am for three weeks. John was told to come twice a day, at 11 am and 3 pm for a week and then once a day at 11 am for three more weeks. All the patients assembled in a large and pleasant waiting room. A uniformed official stood at the door of the surgery calling the patients' names in turn. As one's name was called he walked into the surgery. A big muscular man

14,971		Cracken		Tableau 1		Traitement		14,971	
Nom et Prénoms	Mac Cracken John								
Âge et Profession	22 ans								
Domicile	Bladunberry								
Date des symptômes	22 8 hr								
Nombre et siège	22 8 hr								
État	crante sèche								
Habits déchaussés									
Cautérisation au fer rouge									
Agents chimiques									
Époque de la cautérisation									
Renseignements vétérinaires									
Nom et adresse du vétérinaire									
Certificats									
Examen après la mort									
Renseignements divers									
Renseignements particuliers									
À qui appartenait le chien ?									
Qui est-il devenu ?									
Avait-il été mordu par un autre chien ?									
Combien de temps avant sa maladie ?									
Changements de la vie									
du caractère									
At-il mordu d'autres personnes ?									
animaux ?									
Renseignements du laboratoire									
Date de la remise du chien									
Autopsie									
Inoculations									

14,972		Cracken		Tableau 1		Traitement		14,972	
Nom et Prénoms	Mac Cracken Nathaniel								
Âge et Profession	22 ans								
Domicile	Bladunberry								
Date des symptômes	22 8 hr								
Nombre et siège	22 8 hr								
État	crante sèche								
Habits déchaussés									
Cautérisation au fer rouge									
Agents chimiques									
Époque de la cautérisation									
Renseignements vétérinaires									
Nom et adresse du vétérinaire									
Certificats									
Examen après la mort									
Renseignements divers									
Renseignements particuliers									
À qui appartenait le chien ?									
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At-il mordu d'autres personnes ?									
animaux ?									
Renseignements du laboratoire									
Date de la remise du chien									
Autopsie									
Inoculations									

gripped him around the waist, and once the doctors had injected the serum into his side he then passed through another door into a room where he could rest a little while before going home. Sometimes a new and nervous patient would feel sick, or perhaps faint. There were nurses to attend to him or her. The patients came from many different countries and spoke in different languages. Once during one of our visits Monsieur Pasteur came in, surrounded by doctors. He looked old and feeble. I believe that he died the following year. When we came back home, my father was presented with an illuminated address and a bag of sovereigns by the members of two churches which he had attended at different stages of his life, joined by many neighbours as well. So far as I know, the illuminated address was hanging in the lounge of my brother's house until his death less than two years ago. During our absence, my mother's distress was increased by arguments for and against the effectiveness of the Pasteur treatment. Journalists then were as ruthless as they are now.

These notes, from memory, are jotted down very roughly, merely because you asked me to do that. I have not re-written them because you will probably pick what you like—"no names, no pack drill."

Yours very sincerely,
Nathaniel McCracken.

* * *

The illuminated address is still in the family, and I have a copy of the letter accompanying this and the bag of sovereigns. My father was born in 1881, died in 1966, and was 13 when he was taken to the institute. Last year when we were in Paris my wife suggested we visit the Pasteur Institute. The nearest Métro station is called "Pasteur." We were received with the greatest courtesy and kindness. Pasteur's living quarters are preserved as they were in the days he lived there with the same

furniture, drapes, photographs, and paintings. These are in their original places, and it is easy to imagine him at his desk or in his armchair.

Mlle Bricka of the institute was very interested in my father's story and said she would look up the record of his visit. All records from the inception of the clinic are still kept. Soon after we returned home I received photostat copies of the clinical records of both my father and his brother (fig). My father, who had been scratched on the wrist, had received 15 treatments and his brother, who had been scratched on the nose, 21.

Although people from all over the world visit the institute, apparently very few from this country do so. Pasteur was of course given a State funeral, and the government decreed that he should be buried in the Panthéon. Madame Pasteur refused this last honour as she wanted her husband's body to be placed in a funeral chapel to be specially built on the ground floor of the main building of the institute. Pasteur's son undertook the direction of this work. He engaged a team of very well-known artists, and the Chapel of Saint Nazaire and Saint Celse at Ravenna in Italy was taken as the inspiration. The new chapel was constructed in the shape of a Latin cross with a cupola in the Byzantine style. Pasteur's work is portrayed symbolically in polychrome mosaic over the entire vault. When Madame Pasteur died in 1910 her grave was placed at the foot of the altar, and the gravestone inscribed:

Here Lies Marie Pasteur
1826-1910

"Socia rei humanae atque divinae"

(Her husband's companion in things human and divine)

Pasteur's death mask is also there in a niche.

The visit made a deep impression on me partly of course because of my personal interest. I think most doctors would find their Parisian holiday enriched by a visit, and it would be one of the memories of the holiday which would last longest.

(Accepted 21 November 1980)

A 28-year-old woman who suffers from multiple sclerosis has queried the advisability of having her baby girl immunised against measles, as she has read about a possible connection between measles virus and multiple sclerosis. Is this correct?

The question is a difficult one. Theories concerning the aetiology of multiple sclerosis include many widely diverse factors—geographical, genetic, dietary, immunological, and infective. Probably many diverse factors act in combination. In an investigation,¹ immunoglobulins M and G specific for measles were found significantly more often in patients with multiple sclerosis than in those with other neurological diseases or in "normal" controls. But if measles is sometimes one factor there are probably many others—for instance, in north-east Scotland,² where there is a particularly high incidence of multiple sclerosis, there is also a high incidence of HLA antigen B7. As for measles immunisation, and the risk (extremely small, if there is any at all), that it might be a factor leading to multiple sclerosis, the difficulty is that at least 90% of all unimmunised children develop measles—and there is no other way of preventing it.

¹ Haine M, Fraser KB, Millar JHD. Measles and other virus-specific immunoglobulins in multiple sclerosis. *Br Med J* 1973;iii:612-5.

² Shepherd DI, Downie AW. Prevalence of multiple sclerosis in north-east Scotland. *Br Med J* 1978;iii:314-6.

Is it necessary to sterilise a metal vaginal speculum for use in general practice surgery procedures, such as taking cervical smears, or is washing the instrument under hot running water with soap and thoroughly drying it sufficient?

The vagina is susceptible to infection by *Trichomonas*, *Candida*, or the gonococcus, and in addition elderly women are susceptible to infection with streptococci, staphylococci, and *Escherichia coli*.¹ Simple washing and drying cannot guarantee eradication of these organisms, and so vaginal specula ought to be sterilised. Boiling water destroys all non-

sporing organisms within 10 minutes,² and this method of sterilisation should be adequate unless the instrument is used to examine traumatised tissue—for example, in the immediate postpartum period—that is susceptible to infection with sporing organisms. An alternative to sterilisation with boiling water is the use of chemical disinfectants, such as glutaraldehyde, or the use of disposable pre-packed instruments.

¹ Hurley R. Microbiology. In: Philipp EE, Barnes J, Newton M, eds: *Scientific foundations of obstetrics and gynaecology*. London: Heinemann, 1970: 597-614.

² Baker FJ, Breach MR. *Medical microbiological techniques*. London: Butterworths, 1980.

What dangers are there in home-bottled vegetables?

All vegetables may be heavily contaminated with soil organisms, which often include the most heat-resistant forms of bacteria, and unless these are killed during sterilisation they may cause spoilage of the vegetables in the bottle. Among these organisms may be *Clostridium botulinum*, the spores of which, if not destroyed, are capable of developing and producing in the food the fatal toxin causing botulism. Bottling vegetables is much more difficult than fruit and requires more elaborate sterilising equipment. Acid foods, however, inhibit the growth of *Cl botulinum* and prevent the formation of toxin, so fruits, including tomatoes, which are definitely acid, may be processed at or near the temperature of boiling water. Non-acid foods, such as peas, beans, and practically all other vegetables, need the higher temperatures available in steam pressure cookers. The addition of small quantities of acids, such as vinegar or lemon juice, does not change the acidity of non-acid foods sufficiently. For these reasons it is not recommended that vegetables should be bottled or canned at home.¹

Ministry of Agriculture, Fisheries, and Food. *Home preservation of fruit and vegetables*. 13th ed. London: HMSO, 1971. Bulletin 21.