The case of the illegitimate gene

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Introduction

The purpose of this article is to show how it is possible to overcome, with perseverance, the rather disturbing prospect of tracing the natural family of an illegitimate patient who has been found to have a serious hereditary disease.

'Life is infinitely stranger than anything which the mind of Man could invent. We could not dare to conceive the things which are really mere common-places of existence. If we could fly out of that window hand in hand, hover over this great city, gently remove the roofs and peep in at the queer things which are going on; the strange coincidences, the plannings, the cross-purposes, the wonderful chains of events, working through generations, and leading to the most outré results, it would make all fiction with its conventionalities and foreseen conclusions most stale and unprofitable.' Sherlock Holmes. In: *A Case of Identity* by Sir Arthur Conan Doyle.

Ever since working with a surgeon whose team managed to trace and treat the members of a large family in which existed the gene of familial polyposis coli, I have looked forward with some relish to 'discovering' a patient of my own in whose case I could involve myself in the fascinating study of genealogy.

Such a patient recently presented in the Out-patient Clinic, was diagnosed and treated, but whose family had not yet been traced. Total colectomy had been performed some months previously and histological examination of the specimen had indicated that no carcinomatous change had taken place. My immediate elation at the prospect of tracing this patient's family was short-lived when I was appalled to discover that the patient was born illegitimate and was adopted with no knowledge of either parent!

The disease of familial polyposis coli is transmitted as an autosomal dominant gene which means that a person with the disease has a 50% chance of communicating it to each child. The dominant character of the gene precludes the jumping of a generation by the disease.

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The patient who appeared in the clinic, Roger H., was aged 30 and, at the time of his diagnosis and treatment, my consultant had attempted to discover his true parentage from the only information the patient possessed, namely, that he had been adopted through a Magistrate's Court in Kingston-upon-Thames in Surrey,¹ and that he thought his father had been a Canadian soldier stationed in England during the war and his surname was possibly B. This latter was an exceedingly common name and did not make the obviously difficult task any easier.

Despite vigorous attempts, my consultant was unable to get any information about the patient's family because of two serious obstacles.

(1) The adoptive father of the patient was dead and his adoptive mother was rather disinclined to discuss anything concerning his true parents.

(2) The Magistrate's Court was unable to find any relevant entries in the Adoption Register and indicated that, in any case, it was not permitted to divulge any information under Section 20 (5) of the Adoption Act of 1958, which would link an entry in the Adopted Children Register and the corresponding entry in the Birth Register. An exception to this could be made only under an order of a court of competent jurisdiction.

A formidable task indeed now presented itself, should I decide to take up the challenge of tracing the true family. I discussed the situation fully with our patient, Roger H., who was most eager to give as much assistance as was possible. In a not too optimistic frame of mind, I decided to tackle the problem.

The first essential was to trace Roger's adoption papers and as I knew that his adoptive mother was not happy to discuss his adoption with anyone, I decided to write her a very forthright letter. The format of this letter was to be the basis for all my subsequent letters to various official bodies and organizations. I think it is relevant at this stage to quote the key paragraph incorporated in these letters: 'I would like to stress that each of the close relations of Roger H. has a 50% chance of having the same disease which inevitably becomes a fatal form of cancer unless treated at an early stage'.

The letter had the desired effect, as Roger's adoptive mother came to see me, bringing with her three documents concerning Roger: (1) Notice of Application for an Adoption Order; (2) Adoption Order; (3) a certified copy of an entry in the Adopted Children Register.

The name of Roger's natural mother, Christine Daisy Lily B. was mentioned in the Adoption Order papers.

I knew that at St Mark's Hospital² in London there was a Central Register of some two hundred families with familial polyposis coli, and hoping that the disease may have been transmitted by Roger's mother, I sent copies of these papers to the hospital.

On the Adoption Order, Roger's original name was found to be Harland B. whose date of birth was 24 August 1943. This birth was registered in the Battle Registration District³ of the East Sussex County Council.

I wrote to the Superintendent Registrar of Births, Deaths and Marriages in the Battle Registration District, who, after a few exploratory 'phone calls to make sure I did not have the same motives as the character portrayed in *The Day of the Jackal*, agreed to send me a copy of the Birth Certificate of Harland B., now named Roger H.

This Birth Certificate contained the names of Roger's natural mother and father, the place of his birth, the occupation of his father, the maiden name of his mother and the address of his mother at the time of his birth.

I sent a copy of this Certificate to St Mark's Hospital and to my pleasant surprise a few days later, I received a letter from them, together with the family tree of the K. family. K. was the maiden name of Roger's mother and the information we had between us indicated that the Christine Daisy Lily B. that I had found was the Christine B. on the family tree of the K. family in the St Mark's register. Christine B. had four siblings, two of whom, Joan G. and Georgina W., had both had colectomies for the disease and each had also produced at that stage one affected child. The mother of Christine B. was Daisy K. who had died of carcinoma of the rectum in 1937 at the age of 43. The siblings of Christine B. had lost touch with her, having last seen her in 1949.

It was now apparent that St Mark's had 'beaten me to the gun' in the tracing of the two generations previous to that of my patient. My immediate task was, therefore, to try to trace the siblings, if any, of Roger H. and their children.

I contacted the occupant of the house that was given as the address of Roger's mother at the time of his birth. The occupant had fortunately lived in the house since before the war, but had been away

most of the time during the war in the Navy. His house had been used by refugees during this period and he had no recollection of Christine B. or a Canadian soldier.

The place of Roger's birth was Stone House, which had been the old Poor Law Institution. Enquiries from County Hall, Lewes⁴ indicated that the case file of Christine B. had been destroyed some years previously.

I was now left with the father's name and occupation as stated on Roger's Birth Certificate. This was my last line of attack and if this failed, my attempts at tracing Roger's family would come to an abrupt halt. The name given was George Edward B., a farm labourer, who was at that time a private soldier in a unit called the Highlanders of Canada. An Army number was also given.

I contacted the Canadian High Commission⁵ in London, which kindly wrote off to Ottawa where all central Army records are kept, in an attempt at finding an address to which George Edward B. may have been discharged on leaving the Army, assuming he had survived the war.

In the meantime, I wrote to the International Investigation Department of the Salvation Army⁶ as I knew that for good causes they undertook to trace missing people, largely through having an office permanently stationed at Somerset House⁷ in London, tracing birth, death and marriage certificates. I sent them copies of Roger's adoption papers, Birth Certificate and the family tree I had received from St Mark's.

I next received a telephone call from the Canadian High Commission, indicating that a thorough search of the Army records in Ottawa revealed: (1) there had never been a George Edward B. in the Canadian Army; (2) there was no such unit as the Highlanders of Canada during the last war; (3) the Army number quoted on Roger's Birth Certificate had not been allocated to anyone by the Canadian Army.

At this stage, it appeared that my luck was running out and my last remaining chance was with the Salvation Army.

A few days later, to my total delight, I received a letter from the Salvation Army, indicating that they had found three more children of Christine B.: (1) John Edward, born 31 January 1940; (2) Michael Royston, born 17 June 1942; (3) Daphne Margaret, born 23 November 1944.

George Edward B. was listed as the father of the first two, but there was no mention of a father's name for Daphne Margaret.

These children were all born at Eastbourne and I next contacted my trusty ally in the Superintendent Registrar of Births, Deaths and Marriages at Battle in Sussex. She managed to find for me yet another son of Christine B., Robert Arthur, who was born

on the 5 May 1947, whose father's name was not listed.

I now had the names of four more children, at least two of whom were almost certainly illegitimate, and the prospect of trying to find them looked rather terrifying.

Grasping at straws now, I telephoned the Ministry of Defence⁸ on the slim chance that the Canadian soldier mentioned on Roger's Birth Certificate may have been in their records of the war.

Yet again, I was amazed at my good luck, as the Ministry telephoned several days later to tell me they had traced George Edward B. in their records. This had not been easy because: (1) he was not a Canadian soldier as had been stated; (2) the Army number had an incorrect prefix.

The Ministry was able to give me exact dates and places of Army service of George Edward B. during the war, the date of his discharge and the address to which he was discharged.

This was a good break but all was far from well, as from the dates I had been given, it was not possible that he could have been the father of Michael Royston B. or Harland B. (our patient Roger H.) as had been stated on their birth certificates. George Edward B. had been discharged to an address in Ashford, Kent, and I contacted the local Police⁹ who investigated his discharge address. He was not found at this address but fortunately, the people who were there knew of his whereabouts and they were able to make direct contact with him. He stated that he had divorced his wife Christine in 1942 and had since re-married. He had no knowledge of the last four children produced by Christine, but was able to give me the address of John Edward B. in Cheshire, who appeared to be the only legitimate child of Christine B.

I wrote my standard 'cancer' letter to John Edward B., the contents of which resulted in his appearing at his doctor's surgery the same day in a rather distraught state, this having been my general intention. His doctor contacted me and arranged for his patient to be seen by a local Consultant Surgeon for sigmoidoscopy and barium enema. I was now left with three of Roger's siblings to contact.

I breathed a sigh of relief in having 'disposed of' one of the four outstanding problems.

George Edward B. told his local Police that he thought the illegitimate children produced by his wife may have been put into the care of the Kent County Council. When the Police informed me, I contacted the Social Services Department of the Council¹⁰ which undertook to attempt to search their records for any references to the three unaccounted-for children.

The Salvation Army next discovered that Daphne Margaret B. had married Alfred Ernest M., a Petty

Officer in the South African Navy. I spoke to the Naval Attaché at the South African Embassy¹¹ who wrote to the department of the Navy in South Africa¹² to trace the whereabouts of Petty Officer M., who was known by the Naval Attaché to have been definitely in the Navy up to 3 years previously.

The situation was now gathering momentum, but I was not prepared for the scope of my next information which was obtained in a letter from the Social Services Department of the Kent County Council. All three of the missing children had been admitted, between the ages of three and five, to an orphanage, the Birchington, Kent, Branch of Spurgeon's Homes.¹³

The Director of the Spurgeon's Home was able to tell me that Christine B. died of cancer on the 5 June 1957, in St Mary's Hospital, Eastbourne.¹⁴ He was certain that she had only the five children whose names we already knew.

Robert Arthur B. was killed in a motor-cycle accident in Oxted on the 13 October 1972. At the time of his death he was unmarried and apparently childless. As this was a violent death, he should have had an autopsy and I contacted the local Coroner's Officer¹⁵ who agreed to search his records to see if there was any mention of familial polyposis coli by the pathologist.

Robert's father was Arthur F. The father of Michael Royston B. and Daphne Margaret B., and presumably our patient Roger H. (Harland B.), was Harland D. who was serving with the Canadian forces and was killed in action on D Day.

The Director of the Home confirmed that Daphne B. had married a Petty Officer in the South African Navy, told me they had five children and gave me their current addresses in Cape, South Africa. I wrote to her immediately.

Michael B. was also married with two children and I was given an address in Oxfordshire. He was also sent an immediate letter.

A few days later, I received a letter from the Department of Health and Social Security¹⁶ to which I had written some weeks previously. They had found an Insurance Record that probably indicated the current address of Michael B. and they were prepared to forward a letter to him on my behalf. As I thought it wise to have several irons in the fire, I sent a copy of my letter to Michael B. in a sealed envelope to the Department of Health and Social Security for them to forward to him.

A letter arrived the next day from the brother-in-law of Michael B. It was his address in Oxfordshire that had been given to me by the Director of the Spurgeons Home. In his letter he gave me the address of Michael B. in Morayshire, Scotland, and said he had sent my letter to him. I was also given the address of the local Royal Air Force Medical Officer¹⁷ as Michael B. was in the Air Force.

FIG. 1. Familial polyposis coli. O, Unaffected by polyposis coli; ◐, polyposis coli present; ●, polyposis coli present and carcinomatous change. * Known at St Mark's; † discovered in this research; ‡ the patient.

I telephoned the Medical Officer who was immediately to arrange for a specialist to carry out the appropriate investigations. I was now left with Daphne B. alone to make direct contact.

I had, a short time before, received a copy of the Death Certificate of Christine B., the cause of death being given as carcinomatosis due to carcinoma of the ovary. This was strange, as when she died at the age of 41, I would have expected the colonic or rectal carcinoma to have developed. I discovered from the patient's old notes which had been kept at St Mary's Hospital, Eastbourne, since her death in 1957, that she had been subjected to a laparotomy 8 months before her death, when a cystic tumour was found to be affecting the right ovary. A total hysterectomy and bilateral salpingo-oophorectomy had been carried out. The histology report indicated that the tumour was an adenocarcinoma. Five months later, the patient was found to have an enlarged liver and she died 3 months from then. No postmortem was carried out. I contacted the Surgeon who performed the laparotomy and he could remember no evidence of bowel pathology. There was no record of the patient having had a sigmoidoscopy or barium enema. The possibility of a Krukenberg tumour from an unsuspected colonic tumour had to be considered and I asked the Pathologist to review the slides and perhaps cut fresh sections from a block of tissue if one had been kept.

My next information came from the Coroner's Officer of the Reigate Police, who sent me a copy of the postmortem report concerning Robert B. He had died as a result of multiple injuries, but there was no mention of familial polyposis coli. I telephoned the Pathologist who confirmed that unfortunately in retrospect, the colon had not been opened during the postmortem and, therefore, the presence or absence of the disease was not known.

About 1 week after I obtained the address in Scotland of Michael B., I received a letter from the Naval Attaché of the South African Embassy in London, which confirmed the South African address of Daphne B. and the fact that she was married to the Petty Officer in the Navy whose name I had been given. This letter also contained the address of the Senior Staff Officer, Naval Medical Services in Simonstown¹⁸ and I wrote to him with the details of Daphne B. Two days later, a letter from him, having crossed mine in the post, arrived indicating that Daphne B.'s husband had taken this officer my letter. He correctly assumed that the disease I had mentioned in my letter to Daphne B. was familial polyposis coli and he requested information I had sent him 2 days earlier.

Three weeks later, a letter from a Consultant Surgeon in Ellesmere Port¹⁹ indicated that John B. had been thoroughly investigated and was free from the disease.

It was not until 5 weeks later that I was to receive further information and in that period of time, I decided to try to trace the source of our illegitimate gene, with the eventual intention of tracking down any relevant side branches of the family. My main assistance here was the Salvation Army's International Investigation Department whose researchers appeared willing and able to check thoroughly the records at Somerset House in order to find the information I required. The Death Certificate of Daisy K. confirmed that she had died of carcinoma of the rectum at the age of 41. We managed to find the entry of her Marriage Certificate, but despite having her exact date of birth which I had obtained from her daughter, Georgina W., we were unable to find any record of her Birth Certificate. This unfortunate fact raised the possibility of her being illegitimate. It had proved difficult enough tracing a family of an illegitimate child born in 1940, and I did not think too highly about the chances of managing this for a person born in 1893!

We discovered that the mother of Daisy K., Christine H., had died at the age of 76 of a cerebrovascular accident, so she was clearly not the transmitter of the disease. According to Georgina W., her grandmother had married twice, the second time to George H. and the first time to Daniel M. No children had resulted from the second marriage, so the carrier of the gene must have been Daniel M., assuming that no mutation had occurred in Daisy K.'s chromosomes.

We had no difficulty in tracing the records of several Daniel M.'s, but none was the right one!

Faced with this problem, we decided to investigate further Christine H. in the hope that we might get some clues about her reputed first husband. The record of marriage to George H. revealed the interesting fact that Christine was not the widow Christine M. but the spinster Christine S.! This confirmed our suspicions that Daisy K. was illegitimate. It appeared that Daniel M. was the *de facto* husband of Christine S. It was then decided to search for Daisy K.'s birth entry under the name of Daisy S., her mother's maiden name. It was hoped that this entry, if found, would give valuable information about the probable father, Daniel M.

At this stage, I heard from the Medical Officer of the Royal Air Force Base at Forres in Scotland that Michael B. had been fully investigated and found to have no polyps.

A further 5 weeks passed before I received the results of the investigations on the last of the members of the B. family. Daphne had been shown to have multiple colonic polyps by both sigmoidoscopy and barium enema. There was no evidence of carcinoma. She was aged 30 and had been entirely free of any symptoms. She was also the mother of five children.

Total colectomy and ileo-rectal anastomosis have now been performed. There was no evidence of carcinoma in the pathological specimen.

From the day I first met Roger H. (Harland B.) in the Out-Patient Department, it had taken 7 months of research to find and have examined all the children of Christine B.

At the time of completion of this article, attempts are still being made to trace Daniel M.

Conclusion

Although only Daphne B. has been shown to have the disease, both John B. and Michael B. should continue to have annual sigmoidoscopies up to the age of 40, when these examinations can be reduced in frequency, perhaps every 2-5 years, as polyps have been discovered in a patient at the age of 70.²⁰ Regular barium enema checks are not necessary as it is highly improbable that colonic polyps would appear in the absence of rectal involvement.

I would like to express my thanks to my Consultant, Mr K. Whittle Martin, who encouraged my researching, the Medical Secretaries Christine and Carol, who patiently put up with all my requests for numerous photocopying exercises and endless letters and all the many helpful people whose organizations and addresses are listed in the references. My particular thanks must go to Mr H. E. Lockhart-Mummery and Dr H. J. R. Bussey from St Mark's Hospital, Mr Thomas P. Addison, Principal of the Birchington branch of the Spurgeon's Homes, Miss Daisy M. Field, the Superintendent Registrar of the Battle Registration District and finally Major Stanley Read of the Salvation Army, without whose untiring assistance I would have found the task impossible.

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