Inferring a Family Relationship Based on Medical History

John M. Hoenig describes how medical data led to a reassessment of the family tree.

I pride myself on using almost every scrap of information I can find in my genealogical research. But there are two lines of evidence that, foolishly, I neglected when I got started.

The first is physical descriptions — hair and eye color, height, distinguishing marks and so forth. This information has obvious use in identifying people in photographs. But it can also provide indications of family relationships. For example, among my Peller relatives there are some with brown, blonde or reddish hair. This might provide hints as to which branch may claim a newfound Peller. The second type of evidence I’ve neglected is medical.

Medical information usually comes from two sources: death certificates and family oral history. But there are other sources. Photographs might show you certain conditions such as a goiter. If you are a direct descendant, you might be able to obtain a person’s medical records by claiming a medical need, such as to assess your health risk factors. However, confidentiality concerns make it increasingly difficult to obtain such records. WWI draft registration cards note medical factors that might affect the suitability of the individual for military service. Obituaries sometimes list cause of death.

Additionally, the US federal census for 1880 has supplemental schedules that detail a number of medical conditions.

Unfortunately, the available medical information is often of very poor quality. Medical knowledge at the turn of the 20th century was not what it is today. Thus, physicians had less ability to describe their patients’ problems. And, specifying cause of death was not considered as important then as it is today.

Consider the case of Sam Peller who died in 1918. The death certificate indicates he died of pneumonia. But, his WWI draft registration card (available on Ancestry.com) indicates he had kidney disease.

I was curious about Sam Peller because he came from Jablonow, Austria, which is a small village where my great-grandfather Zishe Peller was born. It seemed Sam might be a relative. Eventually, I found a living relative of Sam, I’ll call him Benjamin Peller, who didn’t know much about family history, but told me that a number of his relatives had died of kidney disease. At the time, this made no impact on me. I still didn’t know how, or even if, I’m related to the Sam-Benjamin line of Pellers.

Lena’s Reminiscences

A few years ago, I visited my second-cousin Marcia in New York and she handed me a sheaf of papers and said “Here, you’re interested in family history. I found this while straightening up my office”. My jaw dropped when I looked at the papers. There were 20 handwritten sheets of the stories Marcia’s mother Lena had heard as a little girl. The pages were undated, but the paper was yellowed and crumbling.

I surmised that Lena had written her stories sometime between 1930 and 1950. In the manuscript Lena mentioned that my great-grandfather Zishe Peller was one of six siblings and that he had a sister who lived near Jablonow. I knew the names of five of the six siblings. But the existence of the sister living near Jablonow was new to me and very exciting. Who was the mystery sister of my great-grandfather Zishe?

For many towns in what was the eastern Austrian province of Galicia (now the Ukraine), there are fairly complete vital records...
going back to the middle of the 19th century. Alas, Jablonow is not one of those towns. I have therefore had to use indirect methods to fill in the gaps.

I found a record of an immigrant named Tobe Rakowitz coming to New York at the turn of the 20th century to join her brother Charles Rakowitz. She was the daughter of Joseph Rakowitz and Esther Peller, and she was from Jablonow. Further checking found a great deal of interaction between the Rakowitz’s in New York and my relatives. For example, my grandfather’s first-cousin, a Peller, was listed as living with the Rakowitz’s as a border in the 1900 census.

I developed a hypothesis: The unidentified sister of my great-grandfather in Jablonow was Esther Peller-Rakowitz. She was, after all, my only candidate. Jablonow was a small town and Peller is an uncommon name.

Thus, I have been searching for a way to confirm my hypothesis. In the absence of vital records, I’ve been searching for family oral history, photographs, letters or other personal sources that might mention family relationships.

The Medical Evidence
Recently, I picked up some evidence which did nothing for me at first, but then gave me a jolt. A grandchild of Charles Rakowitz (who was thus a great-grandchild of Esther Peller-Rakowitz) told me that five or six of his relatives died of polycystic kidney disease. I remembered only one other group of Pellers — the Sam-Benjamin line — that had kidney disease. Was there a connection?

It became important to learn something about polycystic kidney disease. With such a high prevalence in the two groups of Pellers, I presumed it is a genetic disease and that it could be a dominant rather than recessive gene. But is it linked to gender?

The National Institutes of Health has a wealth of information about genetic diseases. Their webpage indicates that there are three types of polycystic kidney disease: Autosomal dominant, autosomal recessive and acquired. The dominant form accounts for 90 percent of the cases. As we’ll see, because it’s a dominant gene it can be fairly easy to track the disease over several generations. Autosomal means the disease is not associated with a sex chromosome (either X or Y); thus, the disease affects males and females equally.

Autosomal dominant means that a person develops the disease if he or she receives the gene from either parent; it is not necessary to receive the gene from both parents. That explains why the disease can be so prevalent within a family line.

On the other hand, the disease is also associated with high blood pressure, which can occur even before the onset of kidney disease. So, some people with the gene might die of heart disease or a stroke and not be recorded as having kidney disease. Also, it is possible for people with the disease to die of the flu, or an accident or another disease and, again, not be recorded as having kidney disease. This explains why half the children of a carrier of the disease may inherit the gene but many fewer may be recorded as having the disease. The National Institutes of Health webpage also indicates that polycystic kidney disease is the fourth leading cause of kidney failure. Thus, it is important to identify the particular type of kidney disease.

With this information, I contacted Benjamin, the Peller from the other line with kidney disease and asked him more about it. He confirmed that it’s polycystic kidney disease that runs through his family line. I concluded that the Sam-Benjamin Peller line and the Esther Peller-Rakowitz line are related, but that Esther Peller-Rakowitz is not the missing sister from my great-grandfather’s line. The former conclusion is important: It suggests I should ask Benjamin to gather as many family photos as possible of the Sam-Benjamin line and compare them to the photos that Charles Rakowitz’s grandson has of the Esther Peller-Rakowitz line. If they have photos in common that would suggest a close relationship between two lines of Pellers that had not known of the connection.

The latter conclusion that Esther Peller-Rakowitz is not the missing sister in my great-grandfather’s line seems well supported: Of the five people I postulated were her siblings, none of them gave rise to a line with kidney disease. This seems to be strong evidence that Esther was not a full sibling. There is still a possibility she was a half-sibling. For example, my great-great-grandfather might have remarried if his first wife died, resulting in some children with one mother and Esther with another. In this case they would share one parent.

Medical data can be useful for developing hypotheses about family relationships. It also adds some insights, albeit rather creepy, about family history. But, the information is only useful if it is gathered and organized. In this case, the medical evidence cast doubt on one hypothesis, but suggested that two previously unlinked lines of Pellers might be closely related.

Sources of Information About Genetic Diseases:

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