

The History of Vein Access Procedures

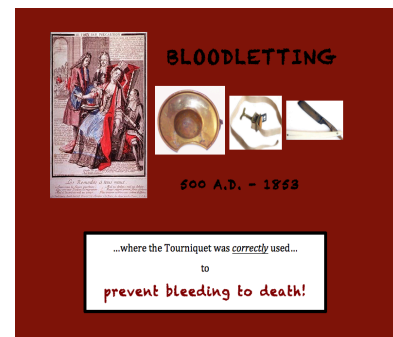


5th - 19th century

The first era of vein access - Bloodletting Era.

The babers used a razor, a bowl, and a tourniquet.

When the surgeons joined in, they replaced the razor with a scalpel instead.



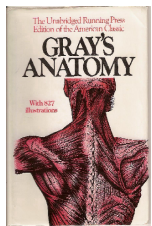
P.S. That is is what the Barber's Pole advertised – **Bloodletting** – not a haircut or shave!

The red was for the blood, the white was for the tourniquet, and the pole was used to squeeze to force the blood out. The razor was used to 'cut' the extremity; the bowl collected the blood; and the tourniquet was applied to prevent 'bleeding to death'.

Bloodletting, the draining of blood from the body, was done to 'remove bad humors' from the body. It was believed back then that people were sick from "bad humors", bad elements in the blood and body. And the barbers thought that if you remove some of the 'bad blood' people would then get well. The problem is, or was, they didn't know how much blood to drain.



And they didn't know where the veins were actually located because the ANATOMY of the body had not been diagrammed yet. Sir Henry Gray did not write



Gray's Anatomy until 1858 – the very last six years of the 19th century – so the barbers (and the surgeons) had no clue



as to where to cut. So they cut a very large area of the arm thinking that surely they would cut a vein, or two, by that method. They did!

The cuts were not precise, because they were barbers, because it was the 5th-19th century, because they didn't know any anatomy, and the surgeons were not like the surgeons of today, they didn't know any anatomy either....they were all 'hoping' to be helpful.

And they also didn't know that there was only 5 quarts of blood in the human adult body, and that all of that massive bleeding sometimes killed the 'customer' (the patient) – the customer 'bled to death'. And that is how the tourniquet came to be used in this vein access procedure, to **prevent bleeding to death**.

But, as with all things in life, things progress, as did the vein access procedure.

Discoveries and developments were made. And one of those was the invention of the needle.

A new era of vein access began.



Q. Why was the needle invented?

A. Necessity is the mother of invention.

People were bleeding to death. And, when the surgeons got involved, so did the 'legal eagles' – *bleeding to death law suits* were a catalyst.

And the 18th Scientific Revolution was producing the science to support the analysis of the old and the creation and advancement of the new.