However, was Marco Aurelio Severino (1580-1656), who revived the tracheotomy as an operation for obstructed air-passages. With this, Severino himself saved the lives of numerous patients during a diphtheria epidemic in Naples in 1610. He constructed a tube-like instrument, the trocar, to keep the incised opening free for air passage after the operation.

**Blood transfusion makes its entrée**

The idea of using blood from a healthy person to transfer youth and vitality to an old or sick one is very ancient. It existed in Egyptian medicine as early as two thousand years before Christ. Similar speculations are found in classical antiquity, as with Ovid:

> Draw only the swords and quick, the changed blood drains from his body—
> I fill his veins with the younger...

We have no definite proof of when the first blood transfusion was made from one human being to another. It was long thought to have happened at Rome in 1492, with Pope Innocent VIII on his deathbed receiving blood from three boys aged ten. The initiative was taken by a Jewish doctor who worked temporarily in the city. All three boys, as well as His Holiness, died. Yet the truth of this tale has been questioned. A particular assertion is that the Pope drank the blood, which is not really how we define a transfusion. Professor Lindenboom of Amsterdam, a researcher in the history of transfusion, considers the entire story a falsification. That some Roman lads were blood-let to death at the same time is credible, but there is no evidence that the Pope was involved.

The potentialities of blood transfusion drew serious attention when Harvey’s discovery of circulation opened up a new view of human physiology. Experiments were originally made by using animals. Thus, Francesco Follì succeeded in Florence in 1654 with good results, and this was repeated twelve years later by Richard Lower of Oxford. The latter’s experiments, made on dogs, were connected with an important discovery: the dark blood which entered the lungs became bright red after leaving them. This beautiful work was published in London under the resounding title Tractatus de Core item de Motu & Colore Sanguinis et Chylī in eum Transītū (1669). Once more, research was followed with interest by the architect Christopher Wren, creator of Saint Paul’s Cathedral and some sixty other churches in the city.

Lower did not limit his experiments to animals. In 1667, he gave a patient blood from a lamb. A transfusion of sheep’s blood was performed in June of the same year in France, by the mathematician Jean Baptiste Denis at the Sorbonne University. The first recipient was Denis himself, and the second a lad of fifteen, whose doctors had put him in miserable condition with twenty blood-lettings, laxations and enemas. Another of Denis’ patients was the Swedish baron Erik Bonde, who became ill during a visit to Paris. As a last resort, this young man was given a transfusion of calf blood on July 24, 1667, but it failed and he died the next day.

After Denis’ initial triumphs, blood transfusion quickly became a vogue in Paris. However, a setback was not long in coming. As we now know, human beings cannot receive blood from just any donor at all. If the wrong blood groups are mixed, complications and even death can result, mainly when waste-products block the kidney passages. At that time, blood groups were unheard of, and many of the transfusions must have had tragic consequences. The first successes were probably due to good luck in using so-called universal donors, whose blood can be given to anyone without risk. But by 1668, the ensuing deaths were so numerous that the government stepped in. An edict by the “Lieutenant Criminel” of Paris decreed that