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# OUT FOR BLOOD!



lood and the voluntary donating of it, which helps in the saving of valuable lives, is very much in the news nowadays. Time was when the red or "blue" precious elixir coursed freely through the veins and arteries, and that was that! Today, things are very much different.

With the passage of time, however, and the introduction into this country during the Victorian era of the penal code styled INCOME TAX, to pay for the colossal cost of the Peninsula War - in flesh and blood and tears - a new type or group of "blood" was extracted from the adult population, which (almost) "bled" the country white!

In a more serious vein (no pun), few people between the ages of 18 and 65 years and physically fit would refuse the giving of a pint of their blood if, for a moment, they were made aware that such offering could mean the saving of a life, as has so often happened, without the slightest injury to the giver.

Thus, all over the world, blood has been regarded from very early times as the life force of the body. In many past civilizations doctors considered the possibility of transferring blood from a healthy individual into one who was sickly and diseased, hoping thereby to restore the sick one to natural vigour.

One of the earliest recorded attempts at transfusion was that performed upon the aged Pope Innocent VIII in 1492. It is not quite clear how the blood was administered, but three youths acted as donors. But the Pope and the three youths died, and the physician who had been conducting the transfusion made off as quickly as he could!

Most of the pioneers in blood transfusion work have been English, with the French coming a close second. It was Waterford-born William Harvey who, in the early part of the 17th century, discovered the circulation of the blood. His fundamental observation showed the way in which transfusion experiments could best be performed, and when the Royal Society was

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created in London in the 1660s its erudite members were much taken with the idea of transfusing blood.

One of those who carried out a number of transfusion experiments on animals was Sir Christopher Wren, the great architect, and another was the outstanding Robert Boyle of Waterford City, who was facetiously known as "the father of chemistry and the son of the Earl of Cork".

Another interested London personality at the time was Samuel Pepys, who noted in his diary on November 14, 1666, how amusing it might be for "the blood of a Quaker to be let into an Arch-bishop and such-like".

Two Irishmen who wrote scientific papers about blood around about this period were Allen Mullin and William Molyneux, both graduates of Trinity College and prominent members of the Dublin Philosophical Society. At the same time "A Physical Discourse, Wherein the Reasons for the Beating of the Pulse are Mechanically Explained" was published in Dublin by Charles Allen, who came to Ireland from York and described himself as "Professor of the Teeth".

These early experiments were all up against a number of technical difficulties, some known to them and some unknown. The main one they were aware of was the rapidity with which blood clotted when once drawn from the vein. They also thought that human and animal bloods were much the same thing, but today we know they were seriously wrong.

In Paris, in 1668, one of the patients of Jean Denys, physician to Louis XIV, died following a series of transfusions of animal blood. Wide publicity was given to the case and thereafter the Faculty of Medicine condemned transfusions as a dangerous practice. The effects of it were soon felt in London, and transfusion then fell into disuse for nearly 200 years, with the exception of some notable attempts in the nineteenth century. In 1857, for in-

stance, a Doctor Higginson took blood from a healthy female servant, famed for her singing of hymns, to give to her sick mistress. Some minutes after the transfusion (so the story goes) the patient lilted "Let's all gather by the riverside and wash our sins away!"

The real advance, however, came just before the Great War (1914-'18), with two discoveries which were to make a modern blood transfusion possible. These were the demonstration of the human blood groups by Karl Landsteiner of Vienna, and the observations by various workers that sodium citrate, a harmless chemical, would prevent blood from clotting.

With the clotting problems solved, transfusion became more deliberate and less of a conjuring trick, and determination of the blood groups showed how donors with similar blood could be chosen for each patient. A Canadian medical officer, Dr. Oswald Robertson, working in France in World War I, developed the idea of the blood bank, a refrigerated store in which blood could be lodged until it was wanted in an emergency.

The need for blood for civilian and military casualties in the Spanish Civil War and in World War II resulted in the development of the large scale transfusion services we know today, and in all modern civilised countries doctors have been quick to see the great advantage such services bring to the ordinary peace-time civilian community.

Nearer home, a visit to the Blood Transfusion Board at Pelican House, Mespil Road, Dublin where Dr. Jack O'Riordan with his team of technicians and donor attendants toil unselfishly, day in, day out, in the cause of suffering humanity, will amply compensate the most sceptical of the many uses of blood; always available, day and night, and promptly on call whenever and wherever wanted.

For the young mother in the maternity hospital; the person involved in a street or factory accident; the person in need of a serious surgical operation, or the youngster suffering from a serious blood disease, etc. blood is always available, notwithstanding how great the demand might be.