

**‘TRANSFUSION’
DICTIONNAIRE DES SCIENCES MEDICALES**

By: PATISSIER

A TRANSLATION BY PHIL LEAROYD

The ‘Transfusion’ entry, written by a person named only as ‘Patisier’, in the ‘Dictionary of Medical Sciences’ (reference volume 55, pages 484-490) by Une Société de Médecins et de Chirugiens, published in 1821 in Paris by Panckoucke, can be viewed or downloaded from the following site:

https://archive.org/details/BIUSante_47661x55/page/484/mode/1up

Note: The author of this entry is identified in the list of contributors at the beginning of the volume as well as immediately after the entry only as ‘Patisier’.

In this dictionary entry, written in 1821 whilst blood transfusion was still effectively banned in France, the author takes the view that Denis and others who originally performed transfusions on humans in the mid 17th century were foolhardy and not acting in the best interests of their patients. The author identifies the arguments used at the time, as well as the subsequent insults, by supporters (led by Denis) and detractors (led by La Martinière) of transfusion. He then makes somewhat interesting (apparently personal) comments regarding the effective use of criminals sentenced to death for such ‘medical research’ rather than actual patients!

Patisier then provides a basic explanation of the direct donor animal artery to human vein transfusion procedure and an overview of the transfusion of calf’s blood by Denis and Emmerets given to a man suffering from ‘periodic madness’ in 1667 and the subsequent fatal outcome and court ruling by the Châtelet in Paris. He concludes by stating that he will ‘not seek to prove how ridiculous this [blood transfusion] was’ and that it has only really been mentioned / included within the dictionary as an example of the history of the medical art.

I have produced a translation of this dictionary entry from the original French into English to hopefully enable its content to be appreciated by a wider audience. Whilst I am obviously aware that instantaneous computer generated translation is available, this process however struggles with accurately reading the original text and interpreting specialist terminology, as well as producing a ‘colloquial style’ not always representative of the original text. In addition, an ‘automatic translation’ may either purposely or inadvertently alter the wording to ‘make it read better’ but in doing so there has to be an element of interpretation involving something on the lines of ‘I believe that this is what the author is actually trying to say’. I want to avoid that as much as possible and try to present what the author actually wrote and as a result the reader may find that the English text does not ‘flow’ as well as it could. Although I have taken great care in accurately identifying the original text and producing a true representative translation of the author’s original wording I cannot guarantee that this work does not contain ‘translational errors’ and the reader is recommended to check specific details against the original text.

I have maintained the original paragraph settings and general layout of the text within the translation. People’s names have been reproduced as originally printed.

TRANSFUSION, s.f., *transfusio*, from the verb transfuse, to decant, to pour from one vessel into another; the action of passing blood from the body of one animal into that of another; an operation contrary to the principles of sound physiology and defended by the public authority under the most rigorous penalties.

This operation made a lot of noise in the medical world towards the middle of the 17th century, from the years 1664 and following until 1668; its fame began in England, and was, according to the most received opinion, the work of Dr. Wren, a famous English physician; it spread from there to Germany through the writings of Major, professor of medicine at Kiel; transfusion was not tried in France until 1666; Denis and Emmerets were the first to practice it in Paris; it first excited great rumours in that city, became a subject of discord among the doctors, and the principal subject of their discussions and their writings; two opposing parties were immediately formed, one of which was opposed and the other in favour of this operation; some claimed that it was a universal remedy; others demonstrated that this method was useless, sometimes dangerous, and even deadly. Soon experiments were made, the results of which were, following his own opinion, disguised the results. Finally, the minds embittered by the dispute ended up insulting each other. The verbose Lamartinière, the athlete of the anti-transfusers, wrote to ministers, to magistrates, to priests, to ladies, to the whole universe that transfusion was a barbaric operation out of Satan's shop, that those who practiced it were executioners who deserved to be sent back among the cannibals, Jerusalem artichokes, etc., that Denis, among others, surpassed in extravagance all those he had known, and he reproached him for having had the puppets performed at the fair; on the other hand, Denis, at the head of the transfusers, called jealous, envious, and scoundrels, those who thought differently from himself, and treated Lamartinière as a miserable tooth-puller and operator of the Pont-Neuf.

The court and the city soon took sides in this quarrel, and this question, which had become the news of the day, was agitated in circles with as much fire, with as little good sense, as in the schools of art and in the offices of the scholars; the dispute began to break down towards the end of the year 1668 by the better known bad effects of transfusion and following a sentence pronounced at the Châtelet, on 17 April 1668, which forbade under pain of imprisonment to perform the transfusion on any human body, unless the proposal had been received and approved by the doctors of the faculty of Paris, and this illustrious company having kept silence on this question, it fell into the oblivion it deserved.

There is little agreement on the origin of the transfusion; several authors fix the date to the seventeenth century, others trace it back to the most remote times, and claim to find descriptions of it in very ancient works. Lamartinière, as jealous of proving its antiquity as its inhumanity, cites several ancient works in support of his feelings. The large number of these testimonies and their authenticity do not allow us to doubt the antiquity of the transfusion. It is not known whether the renewal of this discovery is due to the English or to the French: it seems certain, from the unanimous testimony of authors of different nations that the French were the first to dare to experiment with it on men; but in this do they not deserve more blame than praise? The example of Denis, the first French transfuser, was soon followed by Lower and King. The Italians were no less reckless. In 1668, they repeated the transfusion on several men; Riva and Manfredi performed this operation. A doctor named Sirribaldus was willing to submit to it himself.

Denis made his first experiments on animals of the same species first, then on others of different species. Before applying transfusion to men, he published his experiments to learn the opinion of the scholars. They objected to him and opposed him with reasons based on the principles of anatomy and animal economy. Disdaining reasoning, Denis dared to perform transfusion on humans. Prudence, it seems to us, would have required that he should make the first attempts of so doubtful an operation on a criminal condemned to death; whatever the consequences might have been, no one would have had reason to complain; the criminal, seeing a hope of escaping death, would gladly have submitted to it; it is thus that we should often take advantage of those men whom justice sacrifices to the public safety; they could be subjected to tests of unknown remedies, to new operations, or to

try different methods of operation on them, and one would thereby obtain several advantages: the punishment of crime and the perfection of medicine.

Denis chooses the blood of animals to make transfusion in the veins of patients who would submit to it. Here is the operative procedure: the necessary instruments are two small pipes of silver, ivory, or any other substance, curved at the end into the veins or arteries of the animals which are used for the transfusion, and on which it is made; at the other end, these pipes are made in such a way that they can be adapted with accuracy and ease. With little trouble in causing suffering to the animals which are to supply the blood that is to be transfused into humans, the surgeon conveniently prepares their artery, he uncovers it by a longitudinal incision of two or three inches, separates it from the integuments, and binds it in two places one inch apart, taking care that the ligature which is on the side of the heart can easily be undone; then he opens the artery between the two ligatures, inserts one of the pipes into it, and holds it firmly attached there; the animal thus prepared, the surgeon opens the patient's vein (he usually chooses one of those of the arm), lets the blood flow as much as the doctor judges appropriate, then removes the ligature which is placed, according to custom, to bleed above the opening and puts it below; he makes his second tube whole in this vein, then adapts it to that which is placed in the artery of the animal, and removes the ligature which stopped the movement of the blood; immediately it flows, finding an obstacle in the artery by the second ligation, it threads the pipe, and thus penetrates the veins of the patient. We judged by its condition, by that of the animal which provided the blood and by the quantity which we believed to have been transfused, the time when the operation had to be stopped; the patient's wound was closed with the compress and bandage used in the bleeding of the arm.

The first experiment was made on 15 June 1667, on a young man of fifteen or sixteen years of age, who, after several bloodlettings, was languid; his memory, previously happy, was almost entirely lost, and his body was heavy and numb. After the first transfusion, the patient was perfectly cured, having a cheerful spirit, a light body, and a good memory, according to Denis' report; but the most remarkable observation, the one which has made the most noise, either in Paris or in foreign countries, and which has been the cause of the magistrates forbidding transfusion, concerns a madman, who has been subjected several times to this operation, and who has been perfectly cured of it according to some, and who others claim to have died from it. Here is the abbreviated detail that Denis gives of his illness and the success of the transfusion. The madness of this patient was periodic, returning especially towards the full moon: he had tried different remedies during the last eight years, and among others, eighteen bloodletting and forty baths had had no success; it had even been observed that attacks dissipated more quickly when nothing was done to him than when he was tormented by remedies; it was proposed to give him a transfusion. Denis and Emmerets, consulted on this subject, judged the operation very useful and very practicable: they vouched for the life of the patient, but did not reassure his recovery; they nevertheless gave hope of some relief from the intromission of the blood of a calf whose freshness, they said, and sweetness could temper the ardor and boiling of the blood with which it would be mixed; this operation was carried out on Monday, 19 December, in the presence of a large number of persons of art and distinction: ten ounces of blood was drawn from the patient's arm, and the embarrassed operator was only able to bring in five or six of the calf's blood; they were obliged to suspend the operation because the patient warned that he was close to falling into weakness; no change was seen in the following days; the cause was attributed to the small quantity of blood transfused; however, the patient was found to be a little less carried away in his words and actions, and it was concluded that the transfusion should be repeated once or twice more. The second test was made on the following Wednesday, 21 December, only two or three ounces of blood were drawn from the patient, and nearly a pound of that of the calf was passed to him; the dose of the remedy having been this time more considerable, the effects were more rapid and more perceptible. As soon as the blood began to enter his veins, he felt an extraordinary heat along his arm and under his armpit; his pulse rose, and a short time later a great sweat ran down his face; his pulse varied greatly at that moment; he cried out that his kidneys could not take any

more, that his stomach hurt, and that he was ready to suffocate. The cannula which carried the blood in his veins was immediately removed, and while the wound was being closed, he vomited much of the food he had taken half an hour before, passed the night in the efforts of vomiting, and then fell asleep. After a sleep of about ten hours, he showed great tranquility and presence of mind; he complained of pain and weariness in all his limbs, a large glass of blackish urine, and remained for the whole day in a continual drowsiness; he slept very well the following night. On Friday he returned a glass of urine as black as the day before; he bled profusely from his nose, from which he drew an indication to make a copious bleeding. However, the sick man gave no proof of madness, confessed and received communion to win the jubilee, received with great joy and demonstrations of friendship his wife, against whom he was particularly unleashed in his fits of madness. Such a considerable change made everyone believe that the cure was complete. Denis was not so happy as the others; he still perceived from time to time some frivolities which led him to think that, in order to perfect what he had begun so well, a third dose of transfusion was necessary; he postponed, however, the execution of this design, because he saw the patient recovering from day to day, and continue to perform actions which proved the good condition of his head. Towards the end of the month of January, this madman, who had given great hopes and who had prodigiously swollen the courage of the transfusers, fell ill (Denis does not indicate the character of his illness); his wife, having made him take some remedies which had no effect, addressed herself to Denis, and begged him earnestly to repeat the transfusion on him. It was only by dint of prayers that this doctor, so impatient a few days before to perform this operation on the same patient, then resolved to do so: barely had the vein in the foot been opened to draw blood from him, while a cannula placed between the artery of the calf and a vein of the arm, brought him new blood that the patient was seized with a trembling of all the limbs; the accidents redoubled, and they were obliged to cease the operation, which had scarcely begun, and the patient died during the night. Denis, suspecting that this death was the effect of poison, which the woman had given to the madman to free himself from it, and alleging some powder which she had made him take, asked for the corpse to be opened, and said that he had not been able to obtain it; he adds that the wife told him that she was offered money to maintain that her husband had died of the transfusion, and that he refused to give her any money to assure the contrary. Upon his refusal, the woman complained, cried murder: Denis had recourse to the magistrates to justify himself, and from these disputes resulted a sentence of the Châtelet, which, as we have already remarked, "forbids all persons to make the transfusion on any human body, until the proposal has been received and approved by the physicians of the faculty of Paris, on penalty of prison".

The veracity of this operation has been disputed mainly in relation to the last transfusion. Lamartinière, who claims to know exactly what happened, says that the madman, after having twice undergone the transfusion, of which he was considerably inconvenienced, remained for fifteen days out of the fit of madness, and after that time, precisely at the height of the January moon, the illness began again, having changed its nature; the delirium, previously light and buffoonish, had become violent and furious, in a word, manic; his wife then made him take the Claquenelle powders, which were considered excellent in such cases: it was these powders that Denis wanted to make it look like a poison. These remedies having produced no effect, and fever having arisen, Denis and Emmerets resolved to make the transfusion again; they overcame by their importunity the refusals of the patient and his wife; but no sooner had they begun to make a whole of the blood of a calf in his veins, than the madman cried out, *stop, I am dying, I am suffocating*; these transfusions did not interrupt their operation for this reason, they said to him: *you have not had enough yet, sir*, and yet he expired in their hands. Surprised and angry at this death, they forgot nothing to dispel it; they used the strongest odors and frictions in vain, and after convincing themselves that she was irrevocably decided, they offered the woman, as she declared, money to put herself in a convent, on condition that she would conceal the death of her husband, and that she would publish that he had gone to the country; she had not been willing to accept their proposal, and gave rise by her cries and complaints to the sentence of the Châtelet.

Since this sentence, transfusion has ceased to be practiced not only in France, but in foreign countries; the oblivion into which it has fallen for two centuries clearly demonstrates that it is dangerous, or at least useless. The intrigues, the clamors, the novelty, and party spirit may well give credence to a bad remedy for a time and degrade good ones; but sooner or later the truth is discovered: remedies are appreciated at their true value, the use of some is revived, and that of others is absolutely rejected. The emetic, although proscribed by a request from the doctors of the faculty of Paris, was none the less used by those of Montpellier, then its use became universal, and its usefulness was at last generally recognized, because in fact it is an advantageous medicine; the same was not true of transfusion.

We will not seek to prove how ridiculous was this operation, which has been regarded as leading to immortality: the reader must be sufficiently imbued with the principles of animal economy, that we do not need to inspire him with a distance for this means which we have only mentioned here for the history of art. Those who wish to have more extensive details can consult volume XXXIII of the encyclopedia, article transfusion, and Planque's Dictionaire, volume X; our article is an extract from these works. See also, the article blood, tom. XLIX, pag. 506.

(PATISSIER)

TARDY, *Traité de l'écoulement du sang d'un homme dans les veines de l'autre*: in-8°. Paris, 1667.

SANTINELLI (Bartholomæos), *Confusio transfusionis*; in-8°. Romae, 1668.

MERCKLIN (Georgius-Abrahamus), *Tractatio medica curiosa de ortu et occusu transfusionis sanguinis; qua haec quæ fit è bruto in brutum a foro medico penitus eliminatur; illa, quæ è bruto in hominem peragitur, refutatur; et ista, quæ ex homine in hominem exercetur, ad experientiae examen relegatur*; in-8°. Norimbergæ, 1679-1715. (v.)