

BREVI APPUNTI INTORNO ALLA TRASFUSIONE DEL SANGUE

By: GIUSEPPE BERGONZI

A TRANSLATION BY PHIL LEAROYD

A copy of the paper 'Brief notes on the transfusion of blood' by Giuseppe Bergonzi, published in 1875 in the journal *Archivio Italiano per le Malattie nervose e particolarmente per le Alienazioni mentali* (reference volume 12, pages 56-60) can be viewed or downloaded from the following sites:

<https://www.digitale-sammlungen.de/en/view/bsb11305011?page=58>

https://books.google.co.uk/books?id=N_ljAAAacAAJ&printsec=frontcover&source=gbs_ge_summy_r&cad=0#v=onepage&q&f=false

It is debatable whether this relatively short paper is worthy of translating, given its somewhat rambling style and largely scientifically unsubstantiated content, supported by the fact that it contains no references. However the use of blood transfusion as a method of 'treatment' of people with mental illnesses in Italy was prominent for a substantial period of the 19th century and this author at least concludes against its use. Bergonzi recognises the lack of evidence regarding how blood transfusion could provide a possible treatment for patients with mental health problems and suggests alternative possible options related to the 'transfusion event' that may have been the effective element producing an improvement in the patients conditions, if there is one at all.

NOTE: This is one of four papers published together in this journal – the references to the other three are as follows:

Michetti, A. (1875) Trasfusione del sangue. [Blood transfusion] *Archivio Italiano per le malattie nervose e più particolarmente per le alienazioni mentali*, 12, 18-26.
<https://www.digitale-sammlungen.de/en/view/bsb11305011?page=20>

Ponza, G.L. (1875) La trasfusione del sangue negli alienate. [Blood transfusion in the mentally ill] *Archivio Italiano per le Malattie nervose e particolarmente per le Alienazioni mentali*, 12, 26-56.
<https://www.digitale-sammlungen.de/en/view/bsb11305011?page=28>

Livi, C. (1875) La lipemania stupida la trasfusione del sangue. [Stupid lipemania and blood transfusion] *Archivio Italiano per le Malattie nervose e particolarmente per le Alienazioni mentali*, 12, 60-88.
<https://www.digitale-sammlungen.de/en/view/bsb11305011?page=68>

For an explanation of the use of blood transfusion in Italy to treat Pellagra in particular, see: Berner, B. (2020) *Strange Blood: The rise and fall of lamb blood transfusion in 19th century medicine and beyond*. Medical Humanities (Volume 5). Verlag: Bielefeld.
<https://library.oapen.org/bitstream/handle/20.500.12657/39503/9783839451632.pdf?sequence=1>

See also:

<https://www.transcript-open.de/isbn/5163>

I have produced a translation of this paper from the original Italian 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.

BRIEF NOTES ON BLOOD TRANSFUSION

by Dr. GIUSEPPE BERGONZI, from Reggio-Emilia.

(Memoir read at the 1st Congress of Medical Alienist in Imola)

First of all, it is necessary to observe whether the blood dyscrasia, typical of some lipomania, pellagra and madness in general, can really be cured by the introduction into the circulatory stream of a liquid extremely complex in its constitution, which, if homogeneous in its essential elements (albumin, fibrin, globulin, fatty materials) cannot be said to be such in its secondary elements (salts, mineral principles, etc.) and therefore it remains to be seen whether the heterogeneity in this respect may not be such as to induce, even if only by itself, an alteration of the blood harmful to the physiological state, considering that in each animal varies the power of the organs which in different ways purify the blood and thus make it suitable for the nutrition and excitation of the different tissues, in other words it varies with the quality of the blood even in the different bodies the purifying power of the different glands.

It has been said that some stupid lipemaniacs (in whom transfusions were practiced) immediately afterwards, and even during the operation, presented a certain rise in their psychic faculties which lasted some time. But here it is useful to observe that under any physical pain (which is not lacking in the above-mentioned operation of transfusion) a similar rise is very often noticed, which nevertheless persists for some time: this is what happens when a blistering is medicated, a phenomenon that is reproduced in intervening, inflammatory, febrile, cholera, etc. It must also be reflected that this rise can also be blamed on the moral action that they come to exert on the patient and the imposing apparatus of the operation and the sight of so many people who are watching.

As for pellagra, either transfusion is used in the principle of the same, and then one must not come to such a dangerous curative aid, while the tonic restorative treatment and arsenical preparations and a well-understood hygiene, baths, meat food, etc., can and are sufficient for this purpose; or is transfusion used when pellagra is very advanced, when there are intestinal ulcerations and cerebral oedema, and then what benefit can be hoped for from it? It seems to me that the transfusion of the blood (except in cases of acute anemia) is to be compared to the introduction made in a weak and inert stomach of a good meat food; the stomach will digest this food, or rather will it not reject it of itself? So for the transfusion of the blood, when the vascular system is weak, when all the organs are depressed due to the

lack of vital innervating influence, what can this little blood that is introduced possibly do? - not finding the appropriate reaction in the other tissues and organs of the economy, can it not be secreted as something extraneous? In the case of acute anaemia, everyone easily understands that the blood defect alone is precisely the one that threatens life, and that the organs, having their physiological constitution still quite intact, can then awaken under the benefit of greater blood irrigation, but this cannot be the case when the long-persisting blood defect has already influenced the distorting of the state of the organs, so that these, at a contact with a greater quantity of blood, cannot therefore only return to the pristine degree of complex organization; thus, for example, an atrophic muscle cannot, however much it becomes blood-soaked, acquire its pristine development, and its pristine potency, and this applies to the heart, the vascular system, etc. Transfusion cannot repair the damage that has occurred in an organism damaged by a persistent deficiency of the nutritive fluid, since with the lack of nutrition, and for this very reason with the consequent lack of function, many organs not only atrophy, but undergo many various transformations, such as connective tissue, adipose tissue and the like, and supplying these masses so altered with the blood, the transformed connective or adipose tissue, etc., but nervous, muscular, glandular tissue will not be replenished whatever it is; there will therefore be a hyperemic state of organs that are still distorted, but not the return from the morbid state to the physiological state of the organs that were damaged in their composition due to persistent anaemia.

Nor can the transfusion of blood be considered in these cases merely useless, but also quite harmless, since in the body accustomed to that defective mass of blood as much of it is maintained as the organs capable of producing and purifying it, while by introducing a greater mass the equilibrium can no longer persist; and the blood will either be too copious to flow in the already restricted circulatory tree, or overwhelming to the organs that must purify it and therefore easy the congestions, exudations and morbid processes resulting in an altered blood flow, by altered crasis. And indeed the experimenters seem to recommend repeated blood transfusions, but in this case if the salutary effect is then obtained in the long run, it cannot yet be attributed with logical certainty to the effect of the transfusion, but rather to other conditions, in which they keep the individuals in experimenting, nor can it be maintained in this case that without the transfusion the same result would not have been obtained by placing the patient in the best hygienic conditions.

That the blood exerts an exciting action on the different systems, especially on the nervous and muscular, is evident from many and undoubted facts; but it is also certain that congestion can induce opposite effects, nor can they always be removed in this way at the instant before coagulation in the blood mass or rupture of vessels, effects which can be of irreparable damage and therefore the blood, even if it can be qualified for the most natural stimulant of organs, it cannot equally be said to be the means that art can suggest the most harmless to awaken its functions in every eventuality. And these considerations are all the more to be evaluated when it is a question of the direct transfusion of blood, that is, of non-defibrinated blood, which therefore has that element which so facilitates its coagulation that as soon it becomes clogged in the vessels, and which is introduced into the circulatory tree of the patient not in small strokes, but with violent waves driven by a more or less agitated heart of an animal.

We also reflect that from the pathological anatomy of mental illnesses we are not yet certified as the abnormal psychic state depends exclusively on the more or less of blood that irrigates the encephalic mass rather than on the anatomical, and therefore functional state of the specific nervous elements. Sometimes, everyone knows, you have a state of compression, due to tumors, deposits of pigment, degeneration, replacement of connective tissue and the like.

Therefore, in conclusion, I would say that the transfusion of blood can only be authorized in cases of haemorrhage so copious as to rapidly threaten life, and where all the other resources of art are exhausted: it does not seem to me legitimate to restore the good of the intellect to an individual, to risk endangering, for the reasons I have mentioned, his physical life.