

The operation is effected by thrusting a straight needle, previously oiled, and carrying a silver wire, across the tissues just beneath the vein; and then after re-entering the needle at the point of exit, the operator causes it to traverse the tissues between the vein and the integument, so that after passing in front of the vessel it is brought out at the first opening. In performing this operation the instrument must be pushed down perpendicularly until it strikes the deep fascia, in order to make sure of getting back of the vein. By this manoeuvre a loop is left protruding at one puncture, with the two ends of the wire coming out at the other, while the vein lies between the two portions of wire beneath the surface. The loop is then drawn in, so as by pressure to approximate the sides of the vessels and cause subsequent agglutination; and the ends of the wire are finally twisted together. If desired, the ligature can be carried above the vein, first by pinching up the skin and pushing the needle horizontally across to the opposite side of the vein, and afterwards returning it across beneath the vessel.

The operation must be performed with the patient in the erect position, in order to have the vein well filled with blood; and ligation is repeated at several points, wherever the vessels are most readily isolated, though it is not unusually necessary to ligate above the level of the knee.

There is often considerable hemorrhage following the punctures, but this is from the dilated capillaries, for with careful manipulation the puncture of the vein is exceedingly improbable. Should this complication occur, however, it might give rise to serious phlebitis from absorption of pus through the orifice in the vein, and might soon be followed by the death of the patient. After the ligature has been in the tissues a week or ten days, it is better to untwist the wire and withdraw it, though if left it could do no harm, but would ulcerate its way out in the course of several weeks.

The after treatment consists in applying adhesive strips over the wound, surrounding the limb with a bandage, and keeping the patient at rest in bed for ten days.

The element of safety in this operation consists in making but slight constriction of the veins, so that their walls are merely approximated by the pressure; and the ultimate division of the vessels being very slowly accomplished, so that the open calibre of the vein is not liable to be exposed to a pus secreting surface or cavity.

Dr. Lewis devised this method of subcutaneous ligature of varicose veins with wire, and has practiced it a great number of times, since the year 1859, without any unfortunate result, and without a failure to produce relief.

\* \* \* \* \*

Two weeks have now elapsed since the operation, without the patient having suffered any inconvenience, and the limb shows no appearance of inflammation or even irritation, while the clot in the veins can be easily felt through the skin; hence the ligature can be withdrawn from the tissues by untwisting the wire, and the man discharged from the hospital.

—*Philadelphia Medical Reporter.*

#### TREATMENT OF BURNS OF THE HUMAN BODY.

A man having laid down close to a lime-kiln, fell asleep, and being narcotized by the gases escaping from the kiln, had a large portion of his back burned, or rather almost roasted before he was discovered. Cases are often seen where individuals have been anaesthetized by the carbonic oxide and carbonic acid given off from kilns, and severely burned without being aroused; but there are instances which show that men under the influence of alcohol may also be severely burned without being awakened from a drunken sleep; and, indeed, it is probable that this patient was intoxicated with alcohol at the time he was burned.

The prognosis in burns of the human body depends not merely upon the depth to which the lesion extends, but, in as great a degree, perhaps, upon the extent of surface involved, as in a case where a man died in a few hours from having fallen into a brewer's vat, containing water that was not boiling, but only hot enough to produce violent irritation of the skin of the whole body. So also the exposure of the entire body directly to the rays of the sun is said to have been followed by serious consequences, though the heat applied is certainly not intense.

There are varied degrees in the severity of burns. Sometimes they produce merely an irritation of the surface and erythema of the skin, without any blistering or elevation of cuticle; at other times, as when the injury is the result of the application of boiling water or exploding gases, vesication takes place from effusion of serum under the epidermis. Destruction of the superficial layers of tissue may be looked upon as a still higher degree, which occurs when the heat is applied for a longer period than sufficient to produce vesication; as in the case of a boy who sat down in, and became wedged into, a bucket of boiling water in such a manner that he was unable to extricate himself. Then, again, if the intensity of the heat be still greater, the muscles, ligaments, and even the osseous structures are consumed; as occurs not unfrequently in the frightful burns from prolonged immersion of an extremity in molten metals. These degrees of burn may be greatly increased in number, for at best they are but arbitrary; and, moreover, a number of them may be seen at the same time in different portions of the injured surface, as in the patient, where at a peripheral point there is merely erythema, further inward vesication, and at the centre complete charring and sloughing of the integument.

There are on record some extraordinary instances where so called spontaneous combustion of the human body has occurred, by the charring beginning at an extremity and gradually extending over the entire frame. The presence of large amounts of alcohol in the system, and the existence of a large quantity of fat in the tissues, have been assigned as causes for catacausis, as this phenomena has been denominated. It seems to be necessary that the individual be in proximity to fire, and that during intoxication a part of the body be exposed and burned; when the remainder of the body is entirely