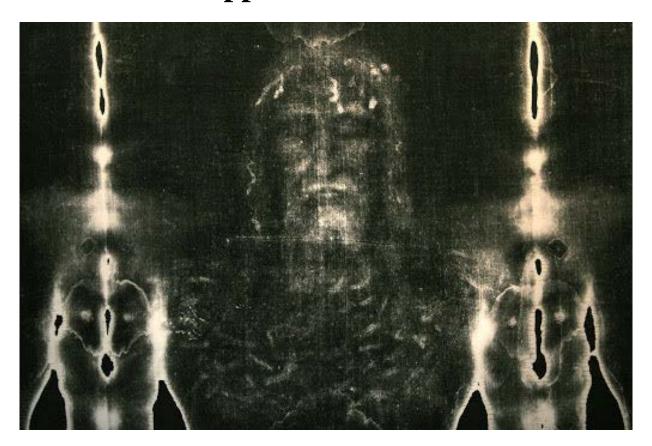
All the characteristics of the blood of man wrapped in the Shroud



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Gelsomino Del Guercio - published on 06/22/20

From the Group to bilirubin, from variations in ultraviolet rays to the absence of "contacts": the mysteries hidden in the sheet where Jesus would have been wrapped

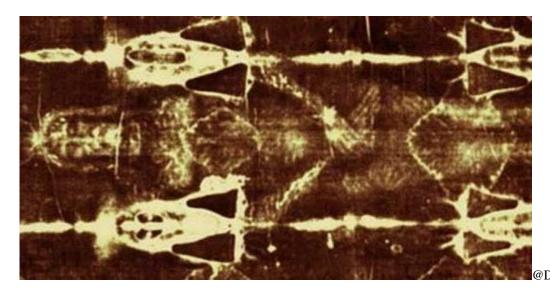
The **Shroud** (from the Greek sindon, sheet) is a long linen cloth (442 cm x 113 cm) which certainly wrapped the corpse of a scourged man, crowned with thorns, crucified with nails and pierced by a spear in the side.

On it is visible the negative imprint of the body that was wrapped in it, in addition to the stains of his blood, which turned out to be **real human blood of group AB**, decalcatosi from the wounds of the corpse in an estimated time of around 36-40 hours. An ancient tradition considers it the funeral sheet of Jesus Christ. It was in the possession of the Savoy family from 1453 until 1983, when King Umberto II gave it to the Pope. Since 1578 it has been kept in Turin.

The main characteristics of blood

The blood existing on the Shroud, investigates " New light on the Shroud ", book edited by Emanuela Marinelli (Ares editions), has a redder color than normal due to the presence of bilirubin and it has been shown by scientific experiments that this is due to a irradiation of ultraviolet light.

Furthermore, on the Shroud there is **methemoglobin**, a product of the degradation of highly oxidized and aged hemoglobin, confirming that it is ancient blood. The theory of an **artful realization of the bloodstains** by a medieval forger is also disproved. But let's go into the details.



Adler's study: ancient plasma

Alan D. Adler, together with the biophysicist and doctor **John Heller** of the "New England Institute for Medical Research" in Ridgefield, in the United States, and the doctor **Pierluigi Baima Bollone**, director of the Institute of Forensic Medicine of the University of Turin, arrived, independently of each other, to demonstrate the presence of human blood on the Shroud

Adler points out that it is blood rich in bilirubin: this means that it belongs to a person who has suffered great trauma. Baima Bollone has shown that it is human blood of the AB group (the least common, 5% of the population); the same blood type as the Miracle of Lanciano and the Sudarium of Oviedo. From the very fragmented DNA it is deduced that it is ancient blood.

The blood and the movements

The man of the Shroud was not washed: this is how the Jewish norms prescribed in case of violent death. The body was wrapped in the sheet about two and a half hours after death. The blood had coagulated on the wounded skin and on the Shroud around the wounds there are halos of serum, visible only in the ultraviolet photos. This blood is redissolved by fibrinolysis in contact with the damp cloth and from the degree of redissolving of the clots it can be deduced that the corpse was in contact with the sheet for about 36-40 hours.

The permanence of the body in the Shroud for a limited period of time can be deduced not only from the interruption of the fibrinolytic process, but also from the absence of any sign of decomposition. The end of the contact occurred, inexplicably, without causing a movement, which would have altered the edges of the traces of blood.



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The Five Scientists Study: Why Is It So Red?

Five scientists plausibly answered a question that seemed to have no answer: why did the blood on the Shroud remain so red?

This is the study of **A. Di Lascio-P. By Lazzaro-P. Iacomussi-M. Missori-D. Murra,** published in "Investigating the color of the blood stains on archaeological cloths: the case of the Shroud of Turin".

Ultraviolet rays and bilirubin

Over the past years, other scholars had advanced their hypotheses, which are reported in the article: presence of pigments, soapwort, bilirubin, and carboxyhemoglobin.

But no one had provided convincing evidence to support his theory.

Only one research had opened interesting perspectives: a red change **in bilirubin-rich** blood was noted **after being** <u>irradiated in the</u> **near** <u>ultraviolet</u>. Going in this direction, the five researchers experimentally demonstrated that bilirubin-rich blood spots remained redder after four years when irradiated with a CV UV (Continuous Wave Ultraviolet) laser. **They also noted that methemoglobin is present on the Shroud**, a product of the degradation of highly oxidized and aged hemoglobin, confirming that it is ancient blood.



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The strong traumas suffered

What is the significance of having a large amount of bilirubin in the blood? If this is not the case for a jaundice patient, it is a sign of severe trauma. And certainly the man of the Shroud suffered severe torture, also confirmed by the presence of biliverdin in the blood.

The origin of ultraviolet irradiation

But what origin could have been the ultraviolet radiation that kept the blood red? In research on the Shroud, the use of a laser is not new: to reproduce the characteristics of the Shroud image, linen fabrics have been successfully irradiated with an excimer laser that produces ultraviolet light.

From the result of those experiments comes a single deduction: the formation of the Shroud image can only be explained by admitting that **the body wrapped in linen has given off, for a very short time, a powerful light.** The Shroud thus leads us, inevitably, to the threshold of a mystery which for the Christian faith is called resurrection.