

¿Why is it necessary to perform autopsies on patients who have died from Covid-19?

¿Por qué es necesario realizar autopsias en pacientes fallecidos por Covid-19?

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Received: Jun 09, 2020 | Accepted: Jun 14, 2020 | Published: Jun 19, 2020

Cited as: Lovo J. ¿Por qué es necesario realizar autopsias en pacientes fallecidos por Covid-19? Univ Méd Pinareña [Internet]. 2020 [citado: fecha de acceso]; 16(3):e551. Disponible en: <http://www.revgaleno.sld.cu/index.php/ump/article/view/551>

Mr. Director:

Examining the morphological changes that a disease causes in the human body has contributed to the understanding of the most basic aspects of its pathophysiology. The benefits of pathological study for theoretical science and practical medicine are undeniable. It seeks to understand the way in which an agent injures the body and the alterations that these changes generate in man.

Since the beginning of medicine, pathology has been essential for the development of both diagnostic and therapeutic strategies. However, as the agents such as SARS CoV-2 are highly infectious, autopsies are prohibited for those who have died from this cause. The basis for the ban lies in the desire to avoid contact with the virus and the potential for contagion for the personnel carrying out the procedure.

Despite this, direct observation of organic disturbances cannot be replaced. Let us remember that the lack of knowledge of the anatomy of man, due to the impossibility of performing dissections on real corpses, led to the extrapolation of ideas based on animal studies that were far from the truth. That is why, even in widely contagious diseases, a limited number of studies are allowed to be carried out in order to realize the reality that the disease produces. From the beginning of the pandemic, guidelines were established for carrying out dissections on patients suspected of death from COVID-19 in those cases that were strictly necessary, and which contributed to scientific research on the subject⁽¹⁾.

Studies show that the virus can cause damage. At the pulmonary level, necropsies revealed pleurisy, edema and pulmonary consolidation. When weight measurements were taken, a higher value than expected was found. At the microscopic level, diffuse alveolar damage, acute bronchopneumonia and focal aspiration were found⁽²⁾.

Xu et al.⁽³⁾ reported the presence of bilateral diffuse alveolar damage at lung level with fibromixoid cell exudates, desquamation and hyaline membrane formation, as well as edema in a sample taken by biopsy at lung level. No significant changes in other organs were reported, although it should be taken into consideration that being a single subject under study, it was not possible to determine any type of neither comparison, nor variations that a large sample could provide.

Wichmann et al.⁽⁴⁾ conducted a study of ten bodies, four of which had died from massive pulmonary embolism, and three of which reported recent venous thrombosis in the absence of pulmonary embolism. The presence of hyaline thrombosis was also found in a small proportion of the pulmonary microvasculature, and they described the finding of hyaline thrombosis in the microvasculature of the spleen and other organs studied, together with focal hemorrhages, degeneration and necrosis.

Necrosis was reported as the main finding of postmortem studies in liver tissue⁽⁵⁾, results that were similar in renal tissue of patients affected by COVID-19.

The prothrombotic activity of the virus, as well as the occurrence of thromboembolism secondary to it, has been described⁽⁶⁾. This inactivity of science has been severely criticized, for it is an invaluable opportunity to understand in depth the changes that the virus triggers in the human body.

A review of the literature found that the number of complete studies on pathology of COVID-19 disease is less than what is described by the literature searchers. Many studies are incomplete, do not describe with certainty the cause of death of the patient, and do not conduct a study of the entire organism⁽⁶⁾.

It is clear that a greater number of studies involving a larger number of samples are needed to unravel the enigmas we are beginning to understand about the virus. Of course, protocols and Biosafety measures must be taken into account to ensure the protection of those who carry out the studies.

CONFLICT OF INTERESTS

The author states that there is no conflict of interest

AUTHORSHIP CONTRIBUTION

The author participate in the writing and review of the article; as well as its concluding version.

FINANCING

The author did not receive funding for the development of this article.

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