

Current Status of Forensic Pathology, Key Issues of Dispute and Countermeasures in China

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ABSTRACT The pathological autopsy of forensic medicine is of great importance, but there are some problems, such as the lack of pathological laboratory, the lack of forensic pathology thinking, the low standard of forensic medicine, the influence of human factors caused by the nonstandard operation of the corpse inspection. The keys to solve the problems of forensic examination and identification in China are: 1) To improve the professional level of the appraisers; 2) The appraisers must abide by the laws and regulations and abide by their professional ethics; 3) The legal order of the appraisal institutions, the appraisers and the identification documents through the reform of the judicial system.

KEY WORDS Forensic Pathology, Inspection and identification, Forensic science.

1. INTRODUCTION

Forensic pathology autopsy is an important means to solve medical disputes or to help the relevant departments to solve cases, as an important means to diagnose the disease, to diagnose the disease and to improve the level of diagnosis and treatment. It has been widely recognized as the "gold standard" for diagnosing and diagnosing the cause of death.

However, for a long time, due to various reasons, there are various problems in forensic pathology autopsy^[1], such as the lack of detailed clinical data, poor judicial ideas, rough inspection, poor selection, lack of basic work, lack of clinical knowledge, lack of clinical knowledge, non-standard report and no fixed standard. Medical disputes are not connected with autopsy and forensic expertise.

2. CURRENT STATUS OF FORENSIC PATHOLOGY IN CHINA

2.1. About the importance and common problems of medical disputes in forensic pathology autopsy

There are studies on forensic pathological autopsy of several cases of medical disputes in recent years to discuss the importance of forensic pathological autopsy in the treatment of medical disputes and ways to prevent common problems. The study conducted a retrospective analysis of autopsy data, including medical records, cause of death appraisal, deceased family members and hospital presentation data, autopsy and histopathological examination related records for the summary, using descriptive, statistical

methods of charting on autopsy data Statistics, analysis of the distribution of medical institutions, causes of disputes, distribution of departments, causes of death, etc. The results showed that the number of medical disputes occurred in county-level hospitals, followed by township hospitals, and the lowest was in municipal hospitals. According to the distribution of departments, the highest number of medical disputes occurred in surgery, followed by pediatrics, obstetrics and gynecology, and the lowest incidence of medical disputes was oncology. The coincidence rates of clinical diagnosis and autopsy pathology diagnosis in individual clinics, community health service centers and township hospitals are relatively low, while the clinical diagnosis of county-level hospitals and municipal hospitals is consistent with the pathological diagnosis of autopsy.

With the increasing incidence of medical disputes in recent years, there are great differences between doctors and patients, especially for cases of unknown cause of death. At this time, forensic pathology autopsy can play a great role.

In recent years, the incidence of autopsy in forensic pathology is on the rise. It shows that medical disputes have been gradually recognized by both doctors and patients. The importance of autopsy to deal with medical disputes is mainly reflected in the following aspects:^[2] 1) for the death cases of medical disputes, especially for the unknown cause of death; 2) it can provide evidence for medical staff in the course of treatment without error or negligence; 3) the need for a period of autopsy identification. Time, objectively, can also make some contradictory heated doctor-patient disputes temporarily cooled, which is conducive to the negotiation and

mediation of the two sides of the dispute.

2.2. Thinking about the pathological examination of basic forensic medicine

With the continuous enhancement of people's legal consciousness, there has been a higher requirement for the examination of the corpse, especially in recent years, in our country, the legal awareness of the citizens has been greatly improved, and the number of the corpse inspection is not promoted. In this case, the corpse of the corpse has been raised. All aspects of the inspection began to receive the attention of the community, especially the corpse inspection work of the grass-roots public security organs. However, the problems still exist, especially in the basic level forensic pathology examination. The pathological examination of forensic medicine at the grass-roots level in our country is not perfect today. It is necessary for the relevant personnel to strengthen the in-depth analysis of the existing problems, and take corresponding measures to improve it so as to improve the level of the pathological examination of the basic forensic medicine.

Problems in the pathological examination of forensic medicine at the grass-roots level:

2.2.1. Lack of pathological laboratory;

At the present stage, many grass-roots organizations do not have their own laboratory of forensic pathology examination. As soon as they need the pathological examination of forensic pathology, most of them will be sent to the pathology department of the local hospital for inspection. Although this way provides filling for the deficiency of the basic forensic pathology examination technology at the grass-roots level, it is theoretically, forensic pathology. There is a certain discrepancy between clinical pathology and clinical pathology, so that it cannot completely replace forensic expertise. At the same time, there are many problems in the forensic pathology examination at the grass-roots level. The material for inspection is mostly random sampling. In the course of testing, there is still a lack of systematic and extensive tests in accordance with clinical practice. Some fatal pathological changes are often ignored. The staining technology of clinical pathology is relatively single, mostly HE staining; resulting in some pathological changes cannot be displayed. Therefore, the insufficiency of the pathological laboratory has brought some obstacles to the pathological examination of the basic forensic medicine, and the construction of this aspect should be strengthened so as to ensure the smooth progress of the pathological examination of the basic forensic medicine.

2.2.2. Lack of forensic pathology thinking;

Forensic practitioners should have a complete and systematic understanding of pathological examination techniques [3]. At the same time, we should fully understand the relationship between law and medicine, and serve "law" as the main purpose of "medicine". The majority of forensic doctors at primary level came from secondary health schools or transferred from relevant medical units, with fewer professional knowledge training, and no systematic sense of forensic pathology. After a lot of forensic medical

examination, only the identification results were provided, but the evidence of the results was not provided, and no effective help was provided for the case investigation of the public security organs. Therefore, it is necessary for forensic medicine to have a certain sense of evidence in the study of pathological knowledge, to fully understand the closure of law and medicine, and to realize the true value of his own-work.

2.2.3. The standard of forensic medicine is low.

In forensic pathology, there are strict industry standards for the extraction and packaging of physical evidence, and it is necessary for forensic doctors to strictly follow the relevant industry standards according to the different cases of corpses. In the process of pathological examination, basic-level forensic doctors often fail to understand the industry standards, have erroneous operations or have not strictly enforced the situation. For example, in the pathological examination of the hyoid bone, the fracture is caused by the wrong operation, which increases the workload. For example, in the forensic pathological examination of a man who suddenly died after being beaten with another person, the negligence of the relevant standard steps results in only a minor trauma to the test result, and the cause of death cannot be confirmed, and the test needs to be performed again. At the time of the second test, the heart and brain were routinely tested and thrombus was found in the coronary arteries of the heart to ensure the accuracy of the case. [4]

3. THE KEY OF FORENSIC PATHOLOGY EXAMINATION IN CHINA

3.1. Authenticator's qualification and ability verification

In some developed countries, in order to become a qualified forensic pathologist, it is necessary to be a graduate of medical science, at least 5 years of medical work. In the 5 years of his work in pathology, it is qualified to apply for training in forensic pathology and apply for the professional qualification of the work. This is relatively low [5]. Although the relevant state departments have made a clear provision for the qualification of the judicial authenticator, in recent years there has not been a strict appraisal system for the qualification of the authenticator, resulting in the uneven level of the technical level of the judicial authenticator, and some of the appraisers' noncompliance with the relevant procedures of the forensic identification. As a result, there are defects or errors in the appraisal results, thus causing the occurrence of appraisal disputes. The technical level of the appraiser directly affects the accuracy and scientificity of the identification results. Sometimes, due to the incorrect technical operation of the appraiser, the original pathological examination material and the poison testing material are not correctly extracted at the initial inspection, and the machine is delayed, and the result of the test is not accurate. It is impossible to find out the truth, thus leading to the appraisal dispute. There are also some appraisers, because of the lack of professional knowledge, the language expression of the written identification documents is not rigorous enough, the analytical reasoning lacks scientific basis, the language expression is unreasonable, the use of

the text is not appropriate or the wrong word appears, thus the occurrence of knowledge identification disputes.

All appraisal activities were ultimately realized through appraisers' appraisal behavior. And identification ability is the key to the key. At present, there are some human factors, ^[6], which affect forensic pathology. For example,

3.1.1. The influence of artificial phenomena caused by abnormal operation of autopsy on forensic pathology;

During cadaveric examination, incorrect judgments can be made if we cannot correctly distinguish between pre injury and postmortem injury. After the body is subjected to violence, a series of life reactions, such as bleeding, tissue contraction and inflammation, can be found in the local and whole body of the injury, which is the basis for the diagnosis of pre life injury. There are sometimes bleeding or tissue contraction caused by postmortem injury, but the bleeding parts usually have less blood volume, no coagulant blood block, small tissue contraction site and no internal curl, and should be carefully identified during the examination of the corpse table. When the autopsy is carried out, the most reasonable anatomical methods should be selected according to the specific characteristics of the case and according to the requirements of the related anatomical standards. Otherwise, it may lead to the difficulties in the identification of the cause of death. If the soft tissues such as neck subcutaneous and muscle tissue are separated according to routine operation, it can cause postmortem percolation, which is often difficult to distinguish with hemorrhage spots in cases of death, strangulation or strangulation, especially when the case is complicated, it often causes controversy on the cause of death and the way of death. In the examination of autopsy and autopsy, if the expert's professional knowledge is weak and the pathological changes that have been discovered cannot be correctly recognized, the error analysis of the cause of death can be produced. If the chicken fat like clots were mistakenly identified as intra-cardiac thrombus, the cause of death was directly erroneous, and the nature of the case was disturbed.

3.1.2. The extraction, fixation and packaging of tissue samples are not standardized;

There are strict industry standards for the extraction, fixation and packaging of forensic pathology materials, and standardized implementation standard is an important guarantee for the smooth progress of forensic pathology identification. In judicial practice, especially in grass-roots public security organs, there are often irregular operations in the link because of inadequate preparation or lack of corresponding consciousness. For example, in the process of extraction, the complexity of the later identification of the case will be increased due to the failure of the professional judgment to detect the damage or the lesion of the lesion, the exfoliation of the hematoma area outside the dura mater before the photo is fixed, or the reason for the fracture of the hyoid bone caused by the unreasonable selection of the material. The nonstandard extraction, fixation and packaging of the specimen will bring great adverse effects to the histopathological examination in the later stage.

3.1.3. Histopathological examination was not standardized;

In addition to the autopsy examination and autopsy examination, the pathological diagnosis of forensic medicine should be histopathologically examined and histopathologically examined. Therefore, a tissue slice derived from pathological specimen is very important for the correct diagnosis of forensic pathology. Small pieces of material used for histopathological examination, such as using non sharp tools or using tweezers with toothed hooks, and hemostatic forceps, are easy to cause damage to the material. The use of trigonometric or square shape marks on the left and right positions and the lack of corresponding records will interfere with the preparation and observation process. In addition, the slicing overlaps, scratches, thin or Overthick. When the water temperature is overcooled or overheated, the tissue is unfolded or broken and the bubble is produced when the seal is stained, which will directly or indirectly affect the effect of the film.

3.1.4. Pathological diagnosis and analysis were not in place.

It is an important link of forensic pathology identification through the observation of tissue section, the examination and identification of the film, the real record of injury or pathological changes under the tissue organ, and the objective and fair conclusion through the professional forensic analysis. The process of examining and identifying the results of pathological diagnosis and analysis is not only to have profound professional knowledge, but also to be careful and patient. In case of serious and complicated cases, medical experts and forensic pathology experts should be invited to consult and joint inspection and identification. If the professional knowledge is not strong or comprehensive, in the process of reading the film, the staining area can be mistaken for bleeding and cannot distinguish the disease characteristic pathological changes, which leads to the pathological diagnosis error. In forensic pathology, it often involves the analysis of the relationship between injuries and injuries, such as misjudgments, which can make the nature of the whole case and the responsibility of the involved person change significantly.

In addition to the fact that the above autopsy operations are not standardized, there are other situations that can lead to human phenomena. If there is no attention to the protection of the corpse during the examination of the corpse, the unrelated personnel enter the dissection area to cause damage to the corpse, and the negligence of the corpse inspection or the negligence of the general recording personnel leads to the incomplete or record error of the inspection record, and the management of the forensic pathology laboratory is not perfect and the inspection of the material is not in place. And even the effect of the mixture of different cases on the appraisal work. Therefore, no matter in any part of the corpse inspection, the operating standards should be strictly enforced. The human phenomenon caused by the non-standard operation is destined to lay a major hidden danger to the appraisal work.

3.2. Autopsy causing body damage

Autopsy usually requires autopsy, which will inevitably lead to changes in body shape, visceral position and structure. At the same time, it is usually necessary to take part of organs and tissues of the identified person back to the laboratory for further examination.

These methods often make the families of the dead difficult to accept, and some of the forensic personnel in advance did not inform the family of the pathological findings of the possible results of the body damage, thus causing the formation of the identification of disputes. In addition, after the death of human body, a number of factors in the body may cause some special corpse appearances. If the autopsy is tested, the family members of the identified people are present, because they are misunderstood as a result of the disappearance of the corpses, and then question the results of the identification.

3.3. Disagreement between certain disputes and professional opinions

At present, there are many levels of forensic experts in China, and there is no clear grade difference between these institutions. There is no clear requirement and specific provisions for re-identification. Therefore, when the family of the appraised person obtains the appraisal conclusion that is inconsistent with their own interests, they can also apply for any appraisal agency to re-apply, and the result will result in a difference in the appraisal results. Even some appraisal conclusions are completely opposite, which is also causing the current forensic doctor. An important reason for the formation of pathological judicial identification disputes.

3.4. The results of medical appraisal do not conform to the interests of the parties

For the parties, the results of judicial identification can only be beneficial to the parties, so in many cases, although the conclusion of forensic forensics is accurate, it will still take up the dispute. The conclusion of the judicial appraisal will continue to question the accuracy of the conclusion of the judicial authentication, and may even cause the discontent of the one party at that time because of the conclusion of the judicial appraisal, and then take the appraiser as the object of dissatisfaction, and then produce an identification dispute.

4. COUNTERMEASURES

4.1. Continuously improve the professional level of the appraiser

As a qualified judicial appraiser, it is necessary to have a comprehensive knowledge system of forensic identification, have a solid theoretical basis for professional knowledge, and must continue to learn new technologies and new theories. In practice, it is necessary to constantly summarize the experience of identification and improve the professional expertise of the appraisers. At present, the qualification of forensic experts in a part of China's accreditation institutions is the premise of forensic pathology related to forensic pathology and more than 5 years of forensic pathology working experiences, or a forensic pathology

examination with a senior title of forensic pathology or a senior qualification, and a forensic pathology should continue to be accepted. Education or vocational training is eligible for application as a forensic pathologist. Try to eliminate the influence of artificial phenomenon caused by abnormal operation of cadaveric examination on forensic pathology.

4.2. Appraisers must abide by laws and regulations and abide by their professional ethics.

The appraiser must carry out the identification operation in strict accordance with the relevant laws and regulations, avoid the violation of the supervision procedure and the relevant regulations, and try to avoid the occurrence of the identification of disputes. The nature of its work requires that every appraisal conclusion of the appraiser should be fair, just, scientific and objective.

4.3. Standardize the legal order of appraisal institutions, appraisers and appraisal documents.

All appraisals serve the judiciary. At present, China's judicial system reform is regulating the legal order of accreditation bodies, appraisers and identification documents through the reform of the system.

5. CONCLUSION

In order to maintain the authority and accuracy of the forensic pathological autopsy, we should strive to reform the existing forensic system, improve the relevant laws and regulations for judicial authentication, standardize the appraisal procedures, improve the individual practitioners' qualifications, and improve the judicial order. To improve the accuracy and reliability of forensic pathology.

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