



### Images and Text Operation Records: Xi'an Agreement

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Operation notes are a very important part of a patient's medical record. They not only record the operation process during the surgery, but also objectively describe the organs lesions. They play a useful role in the referral disease communication, pathological diagnosis, medical practice education, and cases review. However, the current operation notes are hand-written texts therefore many deficiencies as follows: 1. It is difficult to describe the difficult and complicated operation process accurately with the hand-written notes; 2. It is hard to objectively describe the degree of pathological changes of complex lesions and the relationship with the surrounding organs, which may reduce the basic value of the operation notes. It is difficult for pathology doctors to comprehensively understand the disease and make an accurate diagnosis; 3. Due to the differences among doctors and departments in personnel medical professional knowledge and cognition. Text is difficult to realize the condition of accurate communication; 4. For the innovation surgery and new implant materials, the text lacks of intuitive feelings.

Nowadays, with the development of medical informatization, image and character reporting system has been widely applied in areas such as clinical pathology diagnosis, imaging examination, endoscopy and therapy and interventional examination, making the clinical diagnosis and treatment standardize and improved. Those photos and videos of lesions and surgical operations have been widely used in academic exchanges but until now, the system has not yet been used for conventional surgery records. The disadvantages of text operation records have aroused the concern of some surgeons, who put forward the concept of digital operation notes [1-5].

In order to record the tissues, lesions and operation processes more accurately, objectively and in a detail way, providing real clinical data for the follow-up and subsequent treatment of patients, in Xi'an, January 2015, the Chinese medical association held the China surgical operative surgery branch committee meeting, and reached the "Xi'an Agreement" to promote and advocate the implementation of surgical operation records in China, which are presented as follows:

1. Ensure the patients informed consent and protect their privacy as much as possible; 2. The color images, which require more than 300 dpi of resolution and a width of 7.5 cm or more, should be captioned, and those key lesions or anatomical structures should be labeled; 3. The important and complicated operations need to record the location of incision, direction and length through pictures; those difficult endoscopy surgeries also need to show the number and position of trocars with pictures; 4. Before the lesion resection, data including lesion size, color, location and the relationship with

adjacent organs, especially the tumor metastases and enlargement of lymph nodes, should be recorded through photos; 5. Record the conditions after lesion resection; 6. For reconstruction surgeries, the tissue condition before and after the reconstruction should be accurately recorded; 7. For those major or complex procedures, it is necessary to display the condition of wound bleeding and the position of implants before closing the abdomen; 8. Liquid samples should be retained in a transparent glass marked with a scale, and then pictures should be taken; for organization of viscera specimens, before taking photos, a ruler is needed to show the specimens' size; the section of a tumor should also be recorded for tumor specimens.

#### References

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