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Adhere to the Principle “*Primum Non Nocere*”: A Documentary of the Pioneer Scientist in Labor Pain Control in China

By Xian Wang

It is hard to avoid risks during daily medical practice. Even though empiricism hinders the uniformed and standardized procedures, we are still guided by high-graded clinical trials and professional guidelines. Labor pain is considered as the leading cause for seeking Cesarean section in China, whereas how to reach the ideal labor pain control is still not that popular in the most populous country where most of the parous women are blind to the labor analgesia. Dr. Xiaofeng Shen from Nanjing Medical University leads her team march for the goal of “painless labor delivery” by adhering to the principle “*primum non nocere*”. In collaboration with other domestic and foreign peers, Dr. Shen strives to spread and popularize the knowledge of labor pain control in China, which now has been well-known all over the country for their patient-centered efforts, and has been recognized by Chinese professional and health organizations. For the team of Dr. Shen, the practical principle has been perfected to “*primum non nocere, secundus, opinio vulnero*”. ■



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MEDICAL practice involves unavoidable risks of which some are definite but some are random. These risks are associated with the unpredictable biology of the individual like genetic and nongenetic variabilities, age, gender, compliance, and environment. How to reach the goal of “*primum non nocere*”, and then “*secundus, opinio vulnero*” is an art, but also the key principle. Clinical trials and guidelines shape and stand-

ardize the approaches and techniques used for caring, but empirical performance makes them be modified to receive the desired favorable outcomes. When new drugs enter our pharmacopoeia or new techniques enrolled into our routine work, some of them were approved by trials but some not. Therefore, our obligation or commission is of vigilant for the possible side effects or adverse events

that need to be monitored and reported.

One of the major reasons for the high Cesarean section rate in China is the fear of labor pain. However, labor analgesia is the very technique that can relieve the pain effectively, a technique widely applied in the developed countries. In comparison, various reasons such as difference in understanding, insufficient teaching



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Associate Chairwoman of the Chinese Ob/Gyn Anesthesia Commission

Dr. Shen strives to give her patients the safest medical service by adhering to the principle of "*primum non nocere*". She leads her team march for the goal of "painless labor delivery". Right now, Dr. Shen has perfected her memo to be "*primum non nocere, secundus, opinion vulnero*".

of corresponding knowledge, lack of anesthesiologists, unreasonable charges in combination result in the lower rate of labor analgesia (< 10%), but a higher rate of Cesarean section (70-80%) in China. Dr. Xiaofeng Shen, the Chinese pioneer of labor analgesist, led her team successfully carried out labor control study started 1999. Until 2000, more than 60 000 cases received epidural labor pain control. In September 2009, they published their first paper regarding the effect of latent epidural analgesia, cervix < 4cm, on the Cesarean section in the distinguished professional journal of *Anesthesiology* (1), in which Dr. Shen and colleagues enrolled and screened 15 000 nulliparous women requested for epidural analgesia, and they demonstrated that initiating labor analgesia during the latent phase of labor does not increase the rate of Cesarean delivery. Based on their findings, Dr. Shen and her team began thinking about the use of epidural analgesia in high-risk patients like preeclampsia and diabetes mellitus, and they also compared the analgesic effectiveness of intermittent bolus injection of the drug mixture with the continual pump infusion. As Dr. Shen said, all these studies were conducted under the guidance of "*primum non nocere*". This the sole principle for adherence when they carried out one

study and determined whether it shall be propagated or not.

In 2008, a so-called "No Pain Labor N' Delivery" was initiated by the American-Chinese anesthesiologist Dr. Lingqun Hu from Feinberg School of Medicine, Northwestern University, who is committed to promote the popularity of epidural labor analgesia and to establish training bases or centers in China. They aimed to increase the spontaneous childbirth rate as high as 10% and decrease the rate of Cesarean section. Before the activity, most hospitals in China were so limited to promote the popularization and development of epidural analgesia. After spreading, many hospitals right now hope to get Dr. Hu's support. In this context, Dr. Shen and the American anesthesiologists cooperated and collaborated to establish the first training center in China. In 2013, the department of anesthesiology headed by Dr Shen was approved to be the first The Training Base on Obstetric Anesthesia in China by the Chinese Society of Anesthesiology. Meanwhile, Dr. Shen began to operate the informative system in her department that makes the routine anesthesia and analgesia become paperless, which undoubtedly promotes the development of patient safety-centered anesthesia, and also makes the information easily retrievable. With the prospective view, Dr. Shen leads her depart-

ment to build up the Anesthesia Clinic in 2010 to promote preoperative patient-anesthesiologist communication. It was a trial, and it was proved to be a great success. One key factor for the success is that it can help patients to understand the A-to-Z knowledge about the anesthesia, and to soothe patients' anxiety and depression.

Dr. Shen's work caught the eyes of the world and also evoked discussion on this topic in China. On July 15, 2013, the newspaper Medical Forum published one article entitled "How far is the labor analgesia from us?", and then on September 09, 2013, another article entitled "Decrease the Cesarean section rate, anesthesiologists help to do so" was released in the same newspaper. This article caused a big repercussion among obstetricians and anesthesiologists. Dr. Shen, the vice chairwoman of the National Obstetric and Gynecological Anesthesiology Committee, referred that the low labor analgesia rate in China is related to the poor education on corresponding science knowledge, the lack of anesthesiologists, as well as the insufficient attention of mothers and their family. In the hospital where Dr. Shen is working, the rate of labor analgesia is as high as 95%.

Dr. Shen and her team thus far completed over 30 clinical trials registered in the ClinicalTrials.gov. As the municipal and provincial key depart-

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ment, Dr. Shen leads her team march for the goal of “*primum non nocere*”. For them, patient’s safety is the first stone no matter what medical technique will be applied in medical practice. For their practical principle, it

has been perfected to be “*primum non nocere, secundus, opinio vulnero*”.

Conflict of Interests

None

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