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BOLAM CASE – GENERAL CONSIDERATION AND MEDICAL LITIGATION IN SPINE SURGERY

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The aim of this paper is to analyze the evolution of medical litigation cases, from the first such case up to present time, and their importance in our current approach on clinical negligence cases, especially about their involvement in spine litigation cases. The authors present the outcome of the three famous cases of clinical litigation recognized in literature.

The very first such case of litigation was represented by Mr. Bolam's accusation of clinical negligence, in 1957. The conclusion of this case was what became the "Bolam test", describing the clinical negligence of a doctor if three principles can be proven: doctor has a duty of care to the claimant, the doctor breached his duty by falling below the reasonable standard of care or foreseeable harm to occur.

In another relatable case of clinical negligence emerged as the Bolitho case (1996). The judge rulled in favour of the doctors which were accused of clinical negligence. Bolitho case represents a departure from the Bolam case, mostly because the doctors' arguments must be sustained by a logical analysis in order to have an impact on the lawsuit.

Moreover, another important aspect about clinical negligence is represented by the absence of informed consent of the patient, the most representative such case was the Montgomery case (2015).

Spine surgery is considered the medical specialty with the highest risk of a malpractice claim, one in five neurosurgeons facing a lawsuit annually. Therefore, neurosurgeon should be aware of the up to date medical legislation and reasonable standard of care.

Keywords: Bolam case, Bolitho case, Montgomery case, Informed consent, Spinal litigation, Medical litigation.

INTRODUCTION

Medicine is the science where a medical doctor must provide a reasonable standard of care to treat patients with different pathologies. Otherwise, the medical practitioner might be accused of clinical negligence, which is defined as "Failure by a healthcare professional to exercise a reasonable standard of care."[1]. Therefore, how can the justice determine if the medical doctor breached the duty of care?

BOLAM CASE

The judgement of this kind of negligence took place for the first time in 1957, when Mr. Bolam came to Friern Hospital as a psychiatric patient, suffering from recurrent depression. He underwent an electro-convulsive therapy, which induces seizures using electricity.

Unfortunately, due to this procedure, he suffered serious fractures including the fracture of the acetabula due to strong muscle contractions. Mr. Bolam accused his doctor of clinical negligence for three reasons:

1. The doctor did not administer any muscle relaxants;
2. Restraints were not used during this technique;
3. The lack of information about the risks of the procedure.

Therefore, Bolam filed a case against the Friern Hospital Management Committee submitting those 3 possible mistakes of the doctor. The judge of the case was J McNair, who noted at the first instance that many medical opinions were against the use of muscle relaxants, as well as they were against the restraints since it would have increased the possibility of fractures.

Regarding the omission of presenting the risks of the therapy, it was considered that the number of patients with severe disabilities after the procedure was so insignificant, just 1 out of 10.000 patients, that it would produce more harm to a psychiatric patient. As the deputy superintended representing the hospital stated: "I say that every patient has to be considered as an individual … If they are unduly nervous, I do not say too much. If they ask me questions, I tell them the truth. The risk is small, but a serious thing when it happens; and it would be a great mistake if they refused to benefit from the treatment because of fear. In the case of a patient who is very depressed and suicidal, it is difficult to tell him of things you know would make him worse."[2].

The landmark court decision made by J McNair stated: "A doctor who had acted in accordance with a practice accepted at the time as proper by a responsible body of medical opinion skilled in the particular form of treatment in question was not guilty of negligence merely because there was a body of competent professional opinion which might adopt a different technique."[2].

However, judge J McNair added the following caveat: "… a man is not negligent … merely because there is a body of opinion who would take a contrary view … does not mean that a medical man can … carry on with some old technique if it has been proved to be contrary to what is really substantially the whole of informed medical opinion.". This statement expressed the clear decision that a doctor should follow the newest and the best practice in order to assure that a patient would not present any complications as a result of the therapy[3].

Therefore, Bolam test represents a peer-reviewed test, that describes the clinical negligence of a doctor if three principles can be proven:

- The doctor has a duty of care to the claimant;
- The doctor breached his duty by falling below the reasonable standard of care;
- Foreseeable harm occurred to the claimant.

BOLITHO CASE

In 1996, 39 years later after the Bolam case, another relatable case of clinical negligence was represented by the Bolitho case.

Patrick Bolitho was a two-year-old boy, suffering from laryngotracheobronchitis. After two respiratory episodes, he had a whizzy breathing and suffered in a little over half an hour both a respiratory and a cardiac arrest. The doctors were able to resuscitate him, but since the procedure took about nine or ten minutes, he had already suffered severe brain damage which leaded to death.

Patrick Bolitho was under the care of Dr. Horn (Senior Registrar) and Dr. Rodger at that time, who failed to assist him when he suffered the second respiratory episode which was fatal for the two-year-old boy. Patrick's mother accused the local health authority of clinical negligence, arguing that Patrick should have been intubated in order to survive.

On the other hand, Dr. Horn argued that even if she would have assisted Patrick during the second respiratory episode, she would not have intubated the patient due to the high risk of this invasive technique, adding that it is even more dangerous since the patient is only two years old.

The failure in Dr. Horn's duty of care was certain, but the raised question was if that breach was the real cause of Patrick's death.

The judge decided to ask a team of eight doctors whether they would have intubated the patient or not. Five of them disagreed with Dr. Horn's decision to not intubate Patrick. On the other side, three doctors agreed that intubation is a dangerous procedure that was not needed taking into account the symptoms presented by Patrick.

Hence, the judge took into account both opinions of the eight doctors and concluded that even if Dr. Horn would have assisted Patrick without intubating him, she was over the reasonable standard of care according to the views of the three doctors who would have not intubated the patient. Consequently, the breach of duty was proved not to be responsible for the respiratory and cardiac arrest of Patrick[4].

In conclusion, Bolitho case represents a departure from the Bolam case, mostly because the doctors' arguments must be sustained by a logical analysis in order to have an impact on the lawsuit. Therefore, there was a shift from Bolam to Bolitho case, when it comes to defining the legal standard of care.

INFORMED CONSENT

Another important aspect that could prevent the medical negligence is represented by the informed consent of the patient, who has to know the risks of the procedure before accepting to undergo it.

The most representative case about informed consent is signified by the Montgomery v Lanarkshire Health Board, that took place in 2015[5]. In this case, Mrs. Montgomery was a short stature, diabetic woman, who wanted to give birth via vaginal delivery. However, there was a 9–10% risk of shoulder dystocia corelated with maternal diabetes.

The doctor did not inform Mrs. Montgomery of the risks of vaginal delivery associated with shoulder dystocia and he neither offered her the possibility of undergoing a caesarean section. In the end, the child was born with cerebral palsy.

Mrs. Montgomery accused the doctor of clinical negligence and the justice decided that even if the cerebral palsy risk was very low, at about 0.1%, the doctor has the obligation to provide the necessary information about every material risk that exists. A material risk represents an important information that could change the patient decision regarding a surgery or any other medical procedure.

DISCUSION ABOUT SPINAL LITIGATION

A medical malpractice can be divided into two categories which are totally different by the legal point of view, with two possible outcomes. In the first one, criminal charges are pressed against the physician who can end up arrested by the prosecutors. The second one is represented by a civil (tort) claim and it is the most common type of medical litigation. In this case, the plaintiff tries to obtain from the defendant a civil remedy which is usually money damages, either through the judiciary system or through a settlement between the both parts of the civil process[6].

Spine surgeries represent one of the main types of neurosurgical procedures, which is considered the medical specialty with the highest risk of a malpractice claim, 19.1% of neurosurgeons facing a lawsuit annually[7]. Beside of this percent, the spinal surgery also represents a potential danger for the surgeon due to the big number of malpractice claims.

According to a study conducted in 2017, which analyzed a number of 234 cases of spinal surgery litigations with 54.2% resulting in a decision in favour of the defendant and 26.1% resulting in favour of the plaintiff. Moreover, 19.6% of these cases resulted in a settlement[8].

The average neurosurgical malpractice payment in The United States of America is around $439.000, representing the highest indemnity paid for a malpractice of all medical specialties[9]. Furthermore, in cases with a fatal outcome or with a delayed diagnosis and treatment, the verdict of the lawsuit is usually in the favor of the plaintiff, forcing the neurosurgeon to pay a vast amount of money as compensatory damages.

One relevant example of spine surgery litigation is represented by intraoperative neuromonitoring malpractice. In this case, there are two types of allegations that can be made by the patient (plaintiff) against the doctor (defendant): failure to use neuromonitoring or negligent neuromonitoring.

In the first case of malpractice, the doctor is accused of not using any neuroimaging technique, harming the patient in this way. It all relies on the jury's verdict whether or not the physician's decision was correct, but surgical societies as Scoliosis Research Society and the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Disorders of the Spine and Peripheral Nerves stated that intraoperative neuroimaging is indicated.

In the second case of negligent neuromonitoring litigation, the plaintiff must demonstrate that the cause of the injury was due to the lack of actions taken by the physician correlated with the changes of the nervous system functions pointed out by the neuroimaging technique.

In order for lawsuit to become a victory for the patient, he has to prove that[10]:

1. The doctor had the duty of care to use intraoperative neuromonitoring,
2. The duty of care was breached
3. The patient was harmed and
4. The harm of the patient was due to the breach

According to a study conducted in 2020, 54% of the cases were in favour of defendant, 19% were in

favour of plaintiff and 27% resulted in a settlement. The mean amount of money paid as compensatory damages for settlements is $7,575,000 and for plaintiff verdicts is $4,180,213[11].

The high cost of spine litigations can also be seen in the price of the overall treatment. Spine neurosurgeons have a three times higher tendency to practice defensive medicine than non-spine neurosurgeons so as to protect themselves against these kinds of lawsuits. It means that they tend to request the patient to perform more and more unnecessary and expensive imaging procedures, medications and therapies.

All of these malpractice lawsuits appear mostly due to the unsatisfactory results of the surgery, delayed treatment and misinterpretation of the clinical investigations results[12]. But how can a neurosurgeon minimize the risks of going through these kinds of litigations, which sometimes result in a malpractice payment which is with 35% greater than the average fee paid by any other medical specialty?

The informed consent of the patient represents the best way for a neurosurgeon to avoid the clinical negligence claims, taking into account the risks of this medical specialty and the possible catastrophic consequences which can be usually life-threatening if they occur. The main difference between the 20th and the 21th century informed consent can be seen by comparing the Bolam case and the Montgomery case.

Therefore, there was a shift of the manner a therapy should be presented to a patient. Even though in the 20th century the informed consent of the patient was not so rigorous since the doctor was the one who could decide the treatment, these days the informed consent is more centered on the patient decision, who should know every kind of risk of the procedure in order to accept it, even if the probability of a negative outcome is very low.

Consequently, a neurosurgeon should follow a specific protocol in order to avoid a malpractice case. A clear presentation of the pathology should be made by the physician in the first place to ensure the patient understands why he will be treated. Then, the neurosurgeon should recommend a surgical procedure explaining the patient the benefits and the risks of the surgery, as well as the post-operative management. Moreover, any other alternatives should be presented if they exist. This represents the technical discussion about the treatment, but there should also be a personal dialogue with the patient which dramatically improves the neurosurgeon-patient relationship. The doctor should ask the patient about his feelings and expectations towards surgery. In such a way, the bonding between them will be much stronger, based on trust and cooperation[13].

CONCLUSION

The aim of this paper was to analyze and discuss the implication of these three famous cases of clinical litigation from literature and their involvement in shaping the way medical litigation are viewed and addressed up to date, with an accent of their influence in the field of spine surgery.

From its first appereance in 1957 by Bolam case the legal frame of clinical negligence evolved through the years, with important new approaches such as Bolitho case and Montgomery case, making the term “clinical negligence” to refer to a wider specter of implications.

The informed consent of the patient represents the best way for a neurosurgeon to avoid the clinical negligence claims, taking into account the risks of this medical specialty and the possible catastrophic consequences which can be usually life-threatening if they occur.

In the field of spine surgery, the most prone to medical litigation cases, the neurosurgeon should always follow the specific surgical protocol, to have the informed consent of the patient before procedure and to respect the pacient integrity to the fulest in order to avoid a malpractice case.

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REFERENCES

1. Pandit MS, Pandit S. Medical negligence: Coverage of the profession, duties, ethics, case law, and enlightened defense – A legal perspective. Indian J Urol. 2009; 25(3): 372–378.
2. Lee A. “Bolam’ to ‘montgomery” is result of evolutionary change of medical practice towards “patient-centred care.” Postgrad Med J. 2017; 93(1095):46–50.
3. Samanta A, Samanta J. Legal standard of care: A shift from the traditional Bolam test. Clin Med (Northfield Il). 2003; 3(5):443–466.
4. Petera A. Has Bolitho affected assessment of the appropriate standard of medical care? Br J Hosp Med. 2010; 71(6):331–334.
5. Mills F, Epstein M. Risk disclosure after Montgomery: Where are we going? Case Reports Women’s Heal [Internet]. 2019;21:e00090.

6. Larkin CJ, Roumeliotis AG, Karras CL, Murthy NK, Karras MF, Tran HM, *et al.*, Overview of medical malpractice in neurosurgery. Neurosurg Focus. 2020;49(5):1–5.
7. Pokrywka GS. Malpractice risk according to physician specialty. Cardiol Rev. 2012;28(1):629–636.
8. Daniels AH, Ruttiman R, Eltorai AEM, Mason DePasse J, Brea BA, Palumbo MA. Malpractice litigation following spine surgery. J Neurosurg Spine. 2017;27(4):470–475.
9. Elsamadicy AA, Sergesketter AR, Frakes MD, Lad SP. Review of Neurosurgery Medical Professional Liability Claims in the United States. Clin Neurosurg. 2018;83(5):997–1006.
10. Ogla Wiley and Antley Wiley, Plaintiffs-Appellees, v Henry Ford Cottage Hospital, an assumed name for Henry Ford Health Systems, Defendant Appellant, and John Doe, Defendant. Court of Appeals of Michigan. 2003. Docket No. 233220.
11. Hatef J, Katzir M, Toop N, Islam M, Clark T, Roscoe C, et al. Damned if you monitor, damned if you don't: medical malpractice and intraoperative neuromonitoring for spinal surgery. Neurosurg Focus. 2020;49(5):E19-0.
12. Machin JT, Hardman J, Harrison W, Briggs TWR, Hutton M. Can spinal surgery in England be saved from litigation: a review of 978 clinical negligence claims against the NHS. Eur Spine J [Internet]. 2018;27(11):2693–2699.
13. Todd N V., Birch NC. Informed consent in spinal surgery. Bone Jt J. 2019;101 B(4):355–360.