Analysis of lawsuit cases in the Department of Surgery in Korea

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INTRODUCTION

In Korea, about 1,000 cases of medical litigation are filed with the court annually [1], and the Korea Consumer Agency receives about 1,000 cases of remedy for damage in medical care annually [2]. The Korea Medical Dispute Mediation and Arbitration Agency received 5,487 medical dispute mediation applications from April 2012 when it opened until December 2015 [3]. Such an increase in medical disputes and litigation will have negative effects not only on patients and their caregivers but also on medical staff. The increase in medical expenses due to defensive or excessive medical treatment, the cost of medical litigation, and the disparity in the supply and demand of medical personnel may occur [4,5]. Medical
accidents leading to medical disputes and litigation are often related to surgery, which is an invasive medical procedure, and therefore has a high risk [3,6,7]. Patients undergoing major surgery are already at high risk of falling into a dangerous state immediately after surgery due to physical health deteriorating following a procedure. In addition, unexpected emergencies can occur during surgery, and in the event of medical accident the outcome can be very direct and lethal [7,8]. Despite these circumstances, little research [9] has analyzed medical litigation judgments related to the department of surgery in Korea.

In medical litigation, medical viewpoints are different from legal viewpoints, and medical staff needs to understand medical litigation because of the nature of such medical behaviors as unpredictability and incompleteness [9]. In the case of medical accidents, it is possible to identify the type of cause and the medical activities most linked to accidents by examining judgments, and to provide information for prevention [5]. In this article, we analyze the status and characteristics of medical litigation and identify patterns in the types of accidents in the department of surgery in Korea through analysis of specific litigation cases, so as to prepare surgical staff to avoid preventable medical litigation.

**METHODS**

This study used 94 medical civil litigation cases related to the department of surgery where a certain amount of payment was ordered to the defendant, such as cases ruling in favor of the plaintiff, settlements, reconciliation, etc., between 2005 and 2010. Cases were collected from the Supreme Court of Korea’s Written Judgment Management System database of cases filed with the Lower Courts, Appellate Courts, and the Supreme Court. Official copies of the written judgments of all cases pertaining to medical civil litigation from the years 2005 through 2010 were received from the court. A total of 6,074 cases, including original verdict, appeal, final appeal, etc., were received from the court. The collected judgments were reviewed for lawsuit progress, and cases of the same accident were counted as one case. In addition, cases were classified according to medical category, and additional cases were requested if substantiation was necessary for cases prior to 2005 and after 2010 to correctly assess the background, opinion of the court, and course of the trial. A total of 94 unique cases collected through this method were classified as pertaining to medical litigation related to the department of surgery.

In analyzing judgments, the researchers examined time of occurrence, result of accident, amount claimed in damages, amount awarded in damages, plaintiff claims, and court opinion. Among these items, analysis excluded parts not mentioned in judgments. IBM SPSS Statistics ver. 23.0 (IBM Co., Armonk, NY, USA) was used for descriptive statistical analysis.

**RESULTS**

In this study, we analyzed 94 medical litigation cases relating to defendants’ payment of a certain amount to plaintiffs. An average of 3.2 years (range, 0.8–9.2 years) was spent from the date of the accident occurring to the end of the litigation procedures. In the first trial, 67 cases were completed, accounting for 71.3% of total cases. There were 8 cases that proceeded to the Supreme Court. The results of accidents were death (43.6%), followed by additional treatment and complications (21.3%). Other results were surgery discontinuation and dissatisfaction. The liability ratio of the defendants, 40% was the most frequent (Table 1). The average amount of claims for damages was 180,612,030 ± 184,279,290 Korean won (KRW) (range, 4,226,000–1,331,744,167 KRW), and the average amount awarded in judgments for damages was 59,708,983 ± 67,307,264 (range, 1,700,000–365,201,482) KRW. The average age of the patients was 40.3 years, and they comprised 35 male and 32 female patients, except for cases where data for age or sex were deleted in the judgment.

As a result of analyzing plaintiffs’ claims in all except 2 cases, in which analysis was not possible due to lack of content, 67 cases (72.8%) alleged violation of duty of care, 1 case (1.1%) violation of informed consent, and 24 cases (26.1%) violation of duty of care and informed consent. As a result of analyzing the

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. (%)</th>
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<tr>
<td>Progress of the lawsuits (total cases = 94)</td>
<td></td>
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<tr>
<td>First trial</td>
<td>67 (71.3)</td>
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<tr>
<td>Court of appeal</td>
<td>19 (20.2)</td>
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<tr>
<td>Supreme court</td>
<td>8 (8.5)</td>
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<tr>
<td>Results of incidents (total cases = 94)</td>
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<tr>
<td>Death</td>
<td>41 (43.6)</td>
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<tr>
<td>Complications</td>
<td>20 (21.3)</td>
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<tr>
<td>Additional treatment</td>
<td>20 (21.3)</td>
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<tr>
<td>Disability</td>
<td>10 (10.6)</td>
</tr>
<tr>
<td>Others</td>
<td>3 (3.2)</td>
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<td>Limitation of liability (total cases = 38)</td>
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<tr>
<td>20%</td>
<td>2 (5.3)</td>
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<tr>
<td>30%</td>
<td>3 (7.9)</td>
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<td>40%</td>
<td>10 (26.3)</td>
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<td>50%</td>
<td>6 (15.8)</td>
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<td>55%</td>
<td>1 (2.6)</td>
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<tr>
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<tr>
<td>65%</td>
<td>1 (2.6)</td>
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<tr>
<td>70%</td>
<td>6 (15.8)</td>
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<tr>
<td>80%</td>
<td>7 (18.4)</td>
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opinion of the court, 49 cases (52.7%) found violation of duty of care, 7 cases (7.5%) violation of informed consent, and 5 cases (5.4%) violation of duty of care and informed consent. Others, such as reconciliation, accounted for 32 cases (34.4%).

Of the 12 cases that found violation of duty of informed consent, 6 were cases in which physicians explained surgery to the patients but the court judged that physicians’ explanations were insufficient. In other cases, there was either no explanation of risk possibilities and necessity of continuous examination in cases of high-risk patients or malignancy (2 cases), no explanation of limitations of testing methods and possibility of misidentification (1 case), no explanation of necessity and risk related to examination (2 cases), or no explanation of measures to prevent pulmonary thromboembolism (1 case).

As a result of analyzing defendants’ negligence in duty of care in court opinions (Fig. 1), except for 32 cases leading to settlement and reconciliation and 7 cases related only to violation of informed consent, diagnosis (30.8%) was the most common, followed by postoperation management (27.7%).

Analysis of the site and type of surgery revealed that there were 28 cases of colorectum and anus surgery, 23 cases of gastrointestinal surgery, and 9 cases of hepatopancreaticobiliary surgery (Fig. 2).

**DISCUSSION**

In this study, we analyzed 94 cases related to the department of surgery in Korea to assess the characteristics of medical malpractice litigation. The information obtained through analysis, such as patterns in types of medical accidents, their outcomes, and defendants’ negligence in court opinion, could be used as basic data for prevention of litigation.

The average duration until resolution of medical litigation in this study was 3.2 years, and the longest case was 9.2 years. In addition, the average amount awarded in judgments for damages was 59,708,983 KRW. As medical malpractice litigation proceeds, financial, administrative, and psychological burdens are imposed on the medical staff, such as preparation for defense, preparation of related records, and preparation for trial. These also affect the attitude of care, such as defensive medicine, overtreatment, etc. [10,11]. Therefore, further research on aspects of prevention of medical litigation should be conducted.

In the data analyzed in this study, death was the most frequent result of accidents. The more severe the result of the accident, the more difficult it is to resolve the dispute and go to court [12]. Limitations on the liability of defendants ranged from 20% to 80%, and most were limited to 40%. While the ratios of limitation of liability are not consistently applied due to various factors, classification by reason for limiting defendants’ liability can be a useful tool for predicting the judgment of a lawsuit [13]. In this study, the reasons for limitation of liability were classified into the characteristics of the medical practice itself, the defendant factor, and the patient factor. The characteristics of medical treatments were unpredictability of medical practice itself, its limits, risks of the treatment, risks of the disease, difficulty of diagnosis, difficulty of treatment, and whether the appropriate treatment could only be determined after death. The defendant factors included the best efforts of the medical staff, allowing of discretion, commonly used treatments, and explanation of risk to patients. Patient factors included dispositional factors, late visiting the hospital, lack of health management, uncooperative attitude.
degree of complaints about symptom, and patients’ negligence of treatment.

Of the 25 cases in which plaintiffs alleged violation of informed consent, in 12 cases, the court recognized that the defendant was found in violation of duty of informed consent. Of these 12, 6 cases involved insufficient explanations of surgery. Obtaining patient’s consent is important for respecting the patient’s self-determination and is also an important ethical aspect in medicine. It is also important to thoroughly explain the procedure, method of treatment, and side effects so that the patient can participate in the procedure [14]. In Korea, the Medical Service Act introduced a new regulation that requires explanations for surgery, blood transfusion, and general anesthesia, and it was amended to also impose fines for violations and enforced in June 2017 [15]. In surgical fields where surgery and general anesthesia are prevalent, it is necessary to prepare medical staff and institutions to reduce related unnecessary disputes. Definitive medical explanations and consent formation can be means to both protecting physicians and guaranteeing patients’ self-determination [16].

In examining accidents judged to have been caused by defendants’ negligence, those related to diagnosis were the most common. A close look at the contents of diagnoses revealed cases of (1) misdiagnosis without examination, (2) misdiagnosis after examination due to misjudgment or ignoring test results or disregarding joint treatment with other departments, (3) not taking appropriate measures, such as surgery, because of misdiagnosis, or (4) taking inappropriate measures for treatment or surgery. In another study, 96% of clinicians believed that diagnostic errors could have been prevented [17]. In Korea, there are few studies on diagnostic errors. Therefore, studies are needed so as to share related cases and prevent recurrence [18]. In some cases, patient management after surgery was required due to patient complaints of abnormal symptoms, but the doctor did not perform the appropriate examination or take appropriate measures. In particular, the court ruled that when patients complain of an abnormal symptom, doctors should take steps to identify the cause of the abnormality. As such, the court has ruled that a physician’s obligations include not only patient management immediately after an operation, but also the management of the patient in the postoperative recovery process [19]. Therefore, in order to reduce complaints related to patient management after surgery, detailed observation of patients’ condition after surgery, examination for cause of abnormal symptoms, and appropriate diagnosis and treatment should be performed.

In this study, information was limited because court-provided copies of judgments omitted identifiable personal information. In addition, in this study, we analyzed the litigation cases in which a certain amount of payment was ordered to the defendant. Since there are many patient safety incidents that do not lead to medical litigation, this may be different from patient safety incidents that do actually occur. In the future, it will be necessary to measure the type of patient safety incident and to grasp the type of incident using various data and methods.

However, the findings of this study, which identified the characteristics of medical malpractice litigation, are of significance because they can be used to understand and prevent medical litigation in the department of surgery in Korea. Physicians have to conduct appropriate treatment and surgery based on exact diagnosis, improve their surgical skills, and be very careful to monitor patients’ conditions and abnormal symptoms after surgery. In addition to these individual efforts by medical personnel, national support should be provided so that patients and medical staff can establish safe medical environments.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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