Analysis of Judicial Precedents Cases Regarding Skin Cancer from 1997 to 2017 in Republic of Korea

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Background: Both medical disputes and the incidence of skin cancer are increasing in Korea. Objective: The aim of this study was to figure out the medical litigation related to skin cancer and propose a method to prevent the medical disputes. Methods: Skin cancer-related judgments were searched by The Supreme Court of Korea's Written Judgment Management System based on the keywords for skin cancer. The search system included sentenced cases at the Lower Courts, the Appellate Courts, and the Supreme Court from 1997 to 2017. Results: Seven cases were selected as the litigation cases related to skin cancer. Four cases (57.1%) presented malignant melanoma, while the rest presented squamous cell carcinoma, metastatic skin cancer, and peripheral T cell lymphoma (1 case in each). Four cases resulted in death from cancer metastasis, and 3 cases presented as sequelae. The legal issues related to the medical disputes could be categorized as follows: misdiagnosis, delayed diagnosis, performance error, and lack of informed consent. Delayed diagnosis and lack of informed consent were the most common issues (n = 4) in the precedents. Five cases (71.4%) were sentenced the awarded amounts to the plaintiff, including 2 cases of settlement decision. The average awarded amount was 42,553,644 ± 27,567,455 Korean won.

Conclusion: Physicians should pay attention to the cases of the skin cancer to prevent medical malpractice and disputes. The practices pertaining to proper diagnosis, treatment plans, and obtaining an informed consent should be followed during the course of treating skin cancer.

Keywords: Dermatology, Jurisprudence, Malpractice, Melanoma, Skin neoplasms

INTRODUCTION

Medical disputes are increasing worldwide. Recently, researches about medical disputes are presenting the viewpoints of the cause of the medical malpractice or the dispute, while deviating from the existing concept that evaluates the liability of doctors and patients with regards to medical accidents1-2. In recent years, studies on medical malpractice and conflict prevention by medical litigation analysis in Republic of Korea have been published3-6. In dermatology, no paper dealing with specific medical disputes has been reported thus far.

Skin cancer is increasing due to the exposure of ultraviolet radiation by ozone depletion, longer life expectancy, increased early detection rates, and rising public awareness by education7. The prevalence of the skin cancer in Korea is relatively low in comparison to the western countries. However, recent epidemiological studies have reported that the incidence of the skin cancer is steadily increasing7-10. Legal issues related to the skin cancers have been relatively low in Korea. However, the prevalence of the skin cancers is increasing, and the legal access to medical liti-
gation is rising due to changes in the legal environment, hence medico-legal considerations related to the skin cancer are likely to increase in the near future. Therefore, in this study, the authors investigated the litigated cases related to the malignant skin tumors in the past, and then proposed a method to prevent and manage the medical disputes based on the cases discussed to seek the judgment.

MATERIALS AND METHODS

This research included skin cancer-related civil proceedings sentenced within the courts of Korea from 1997 to 2017. The researchers selected the precedents pertaining to the compensatory damage from medical malpractice and in which the disputed disease was skin cancer. To collect the case-related decisions, the researchers visited the Special Collections Reading Room with the permission of the Supreme Court Library of Korea. The Supreme Court of Korea’s Written Judgment Management System, a searching engine for written judgments, is available at the Special Collections Reading Room. Some skin cancer-related search terms were set to avoid missing any case-related judgments. Considering the common histologic types of the skin cancer, following search terms were included: “skin cancer”, “malignant melanoma (MM)”, “basal cell carcinoma (BCC)”, “squamous cell carcinoma (SCC)”, “skin metastasis”, “(extramammary) Paget’s disease”, “mycosis fungoides”, “cutaneous lymphoma”, “leukemia cutis”, “Bowen’s disease”, “angiosarcoma”, “Kaposi’s sarcoma”, and “dermatofibrosarcoma protuberans”.

After searching the related precedents, the researchers requested to review the official copies of the written judgment available with the Lower Courts, the Appellate Courts, and the Supreme Court. The analyzed contents in each litigated case included basic information of the plaintiffs and the defendants, clinical characteristics, and legal issues. The issues of primary disputes were categorized as follows: Misdiagnosis was defined in the cases presenting failure to suspect the skin cancer at the initial diagnosis; delayed diagnosis was stipulated in the cases that considered the skin cancer as the initial diagnosis, but failed to make the final diagnosis appropriately; performance error was inferred from the cases with improper management even after proper diagnosis.

The detailed analysis of each precedent was performed independently by a dermatologist (Cho SI) for the dermatological issues and by a researching physician (Shin SH) for the medical law and ethics. In cases of disagreement between the two authors, the clinical issues were decided after discussing with the other dermatologist (Mun JH), and the legal issues were decided after discussing with the doctor of public health (Lee W).

RESULTS

Keywords and search results

After searching, a total of 132 official copies of written judgments were received from each court. The researchers collected the precedents for each search term following the process of deletion of personally identifiable information by the courts (“skin cancer” [10 cases], “MM” [14 cases], “BCC” [0 case], “SCC” [11 cases], “skin metastasis or metastatic skin cancer” [3 cases], “[extramammary] Paget’s disease” [2 cases], “mycosis fungoides” [0 case], “cutaneous lymphoma” [8 cases], “leukemia cutis” [78 cases], “Bowen’s disease” [0 case], “angiosarcoma” [4 cases], “Kaposi’s sarcoma” [0 case], and “dermatofibrosarcoma protuberans” [0 case]. Of the collected case-related judgments, several judgments were excluded, namely, overlapped judgments, rulings mentioned by the search term that were not the issues of litigation, precedents related to the employment injuries, and cases of the carcinomas other than the skin including the mucous membrane. Finally, 7 unique cases were selected that were identified as pertaining to medical malpractice lawsuits regarding skin cancer (Fig. 1).

Analysis of the judicial precedents involving the skin cancer

Of the total 7 litigated cases, 4 cases were disputed for the MM, SCC, metastatic skin cancer, and peripheral T-cell lymphoma were reported in 1 case each. Disability and complication including death from cancer metastasis were reported in 4 cases, limb amputation in 1 case, mastectomy and pronunciator disorder in 1 case, and hypogonadism with azoospermia was reported in 1 case (Fig. 2). Of the total 7 cases, 3 cases (42.9%) were judged in favor of the plaintiff. In 2 cases, the court dismissed the plaintiffs’ claims, and the other 2 cases involved the settlement decision. Table 1 shows a detailed clinical summary of each case.

The types of medical institutions included 6 university hospitals and 1 local clinic. All the defendants were legal entities. With regard to the medical specialties that led to the lawsuit, there were mainly the departments performing the medical examination, such as dermatology, dental medicine, rheumatology, general surgery, plastic surgery, and radiation oncology with an exception of the department of pathology dealing with the pathologic specimens. Of the 7 sentenced cases, 4 cases (57.1%) were resolved...
**Table 1. Clinical summary of the cases pertaining to the judicial precedents regarding the skin cancer**

| Case | Year (clinical event) | Sex/age (yr) | Initial diagnosis | Final diagnosis | Anatomical location | Disputed main issue | Damage/complication (year) |
|------|-----------------------|--------------|------------------|----------------|--------------------|---------------------|--------------------------|
| #1   | 2007                  | F/NI         | Radiation recall dermatitis or contact dermatitis | Skin metastasis from breast cancer | Chest | Misdiagnosis | Death from metastasis (2009) |
| #2   | 2008                  | M/NI         | Bacterial skin infection | Squamous cell carcinoma | Lower leg | Delayed diagnosis | Limb amputation (2009) |
| #3   | 2007                  | F/55         | Melanocytic nevus | MM | Left lateral ankle | Delayed diagnosis | Death from metastasis (2010) |
| #4   | 2009                  | M/NI         | Oral melanocytic nevus | MM | Gingiva | Misdiagnosis | Death from metastasis (2014) |
| #5   | 2009                  | M/32         | Epithelioid hemangioma | MM | Gingiva | Delayed diagnosis | Language disability (mastication & pronunciation) |
| #6   | 2005                  | M/41         | MM | Forehead | Performance error | Death from metastasis (2007) |
| #7   | 2005                  | M/NI         | Cellulitis→panniculitis | Peripheral T cell lymphoma | Leg | Delayed diagnosis | Hypogonadism with azoospermia |

F: female, M: male, NI: not identifiable, MM: malignant melanoma.

**DISCUSSION**

This study analyzed a total of 7 medical malpractice lawsuits with regard to the skin cancer registered in the past...
Judicial Precedents Regarding Skin Cancer in Korea

Table 2. Summary of the judgments in the cases of the judicial precedents regarding the skin cancer (unit: Korean won)

| Case | Year (clinical visit/start lawsuit/final sentence) | Claimed amounts | Trial outcome | Awarded amounts | Details of awarded amounts* |
|------|--------------------------------------------------|-----------------|--------------|----------------|--------------------------|
|      |                                                  |                 |              |                | Lost earning capacity (disability rate, %) | Cost of treatment, convalescent care, etc. | Limitation of liability (%) | Consolation money |
| #1   | 2007/2010/2011 (appellate court)                 | 129,384,456     | Partially awarded to plaintiff | 15,000,000 | 0 | 0 | 15,000,000 |
| #2   | 2008/2010/2011                                  | 141,742,662     | Settlement decision | 70,000,000 | 0 | 49,455,557 (100) | 3,000,000 | 20 | 13,000,000 |
| #3   | 2007/2011/2012                                  | 158,754,989     | Partially awarded to plaintiff | 23,491,109 | 0 | 0 | 0 | 13,000,000 |
| #4   | 2009/2015/2015                                  | 256,022,578     | Dismissal     | 0             | 0 | 0 | 0 | 0 |
| #5   | 2009/2013/2017 (appellate court)                | 168,847,080     | Settlement decision | 74,277,111 | 0 | 254,365,837 (30) | 17,019,772 | 20 | 20,000,000 |
| #6   | 2005/2006/2008                                  | 274,252,613     | Partially awarded to plaintiff | 30,000,000 | 0 | 0 | 0 | 0 |
| #7   | 2005/2008/2013 (supreme court)                  | 134,400,736     | Dismissal     | 0             | 0 | 0 | 0 | 0 |

*Awarded amounts were calculated as followed: (lost earning capacity + cost of treatment, convalescent care, etc.) × limitation of liability + consolation money.

Table 3. Plaintiff’s allegation and the medical disputes listed in each case-related judgment

| Case | Misdiagnosis | Delayed diagnosis | Pathology interpretation error | Performance informed error | Lack of informed consent |
|------|--------------|-------------------|--------------------------------|---------------------------|-------------------------|
| #1   | ×            | O                 | D                              | ×                         | ×                       |
| #2   | ×            | D                 | O                              | ×                         | ×                       |
| #3   | ×            | D                 | D                              | ×                         | ×                       |

O: in favor of the plaintiff, D: settlement decision, ×: dismissal for claim. *CD31 was mis-interpreted as positive in the primary histologic examination.

20 years (1997 ~ 2017) in Korea. Except for 2 cases, the other 5 judicial cases were filed since 2010. Increasing pattern of the malpractice claims since 2010 was also reported in another study related to the plastic surgery. The course of the skin cancer involves a long time from the diagnosis to the fatal outcome. This study revealed that, for a skin cancer to attain the final outcome, several years elapsed ranging from at least 2 years to the maximum 5 years. Literature reports in Korea have reported a steady increase in the skin cancer incidence in Korea. Considering this, the skin cancer related lawsuits are likely to increase in the near future. Every doctor, including a dentist, needs to know about the skin findings suspected of malignancy, and should keep in mind the possibility of developing skin cancer. Skin cancers, such as MM and SCC, are common in skin areas exposed to ultraviolet rays, but may also occur in the oral cavity or gum. Metastatic skin cancer can manifest at various sites of the body according to the type of the cancer of primary origin. Cutaneous lymphoma may involve multiple systemic symptoms with skin involvement at various sites. In this study, a majority of cases were related to the MM. In a study of analysis of 99 litigation cases related to the skin cancer, BCC (n=25), MM (n=24), and SCC (n=20) were the most common. The medical disputes regarding the skin cancer can occur at various stages of the treatment course. It can be divided into 3 main steps: 1) when a patient meets a physician in the examination room, and a differential diagnosis is made (misdiagnosis), 2) when the final diagnosis is confirmed by the clinicians or pathologists (delayed diagnosis), 3) when a clinician decides the method of treatment, and treats the patient based on the final diagnosis (performance error). These steps involve the physicians of any specialty, who may become the subjects of medical litigation, including dermatologists. Furthermore, informed consent should be obtained from the patients in all treatment courses. Table 3 summarizes the alleged violation of duty and the admitted fault (type of negligence/malpractice) by the court for each case in the present study.
In the first step, medical staff is likely to perform a medical error most commonly. Lydiatt reported that more than half of the 99 skin cancer-related lawsuits (54%) occurred due to the diagnostic error for the skin cancer, and about half of them (48%) were not confirmed by biopsy. Jackson reported that in 75 melanoma-related malpractice cases, the medical error of delay in making diagnosis was mostly common (29%). Case #1 of this study involved the delayed biopsy caused by misdiagnosis; whereas, case #4 was related to the misdiagnosis of the skin cancer, which led to the medical litigation. It is necessary to perform a prompt skin biopsy if there are suspected findings.

The second step involves a diagnostic error even after an initial diagnosis. There may be late checking of the pathologic result following a histopathologic diagnosis. The cases #2 and #3 showed pitfalls in checking the pathologic reports. In case #3, the histopathologic findings of the skin cancer were found in the third biopsy specimen, but the medical staff did not confirm the results. One study in Korea reported that in 3% of the cases, the patients did not visit the hospital after the biopsy for checking the result, many of which included findings of malignancy. As a plan of prevention, it is necessary to make an automated notification system and deliver the abnormal findings such as malignant tumors to the medical staff or patients.

Physicians should consider the possibility of interpretation error while specimen processing. Crowson found 25 significant errors in a retrospective study of the pathologic results of 35,765 cases. In this study, a medical pitfall of the pathology department was noted in case #5, resulting in the judgement in favor of the plaintiff. The errors in the histopathological diagnosis of the MM mentioned in the court rulings sentence were considered in the method of staining and interpretation. To prevent a pathologist’s error of interpretation, it is necessary to make the diagnosis in cooperation with a clinician or by obtaining a second opinion from another pathologist in cases with unclear pathologic results.

There can also be medical disputes in the third step; the so-called performance error. In skin cancer patients, recurrence should always be searched for by regular follow-ups. The clinicians should keep newly updated guidelines in mind and consider additional diagnostic plan for metastasis. In case #6, the main disputed pitfall was the failure in performing the regular follow-up observation. It is important to obtain an informed consent from the patients at all steps of the medical practice. The current Medical Service Act stipulates the obligation of the medical staff to explain the patients the possible risks involved in cases of invasive procedures. However, in addition to the means of avoiding legal liability by the medical practitioners themselves, an informed consent is also necessary to ensure the patient’s right to self-determination. The judicial precedents showed that misdiagnosis does not always mean malpractice. The court decision in the precedent case #4 was that there was no fault of the medical staff. The reason for the court rulings was that, the dentist had no obligation to perform the diagnostic studies for the nevus without the suspected symptoms of the MM during the implant procedure. In the precedent case #7 also, the negligence for delayed diagnosis in the patient with ambiguous physical or laboratory findings involving cutaneous lymphoma was not admitted. Peripheral T cell lymphoma was diagnosed based on the World Health Organization classification along with clinical and laboratory information. Some cases are difficult to diagnose correctly. In this regard, the judge sentenced that the patient being younger and without nodal involvement or any typical laboratory result, it was difficult to diagnose peripheral T cell lymphoma. If the medical disputes occur despite the best care, the physician should give prima facie evidence of the reason to the judge, and it will help the judge to make the correct decision.

In the cases with the judgments in favor of the plaintiffs, the court limited the defendants’ liability for several reasons that affected the deterioration progress and diagnosis of the skin cancer. First reason involved the characteristics of the disease itself as a major cause of liability limitation. Especially in the cases involving the MM, the court noted the characteristics of poor malignancy and diagnostic difficulties of the MM itself. Moreover, since the 5-year survival rate was low in the state of advanced cancer, the limitation of liability by the court rulings included the difficulty to estimate the duration of treatment or avoid extensive resection of cancerous lesions, even though the prompt diagnosis and treatment were noted. Second, the factor of patient was also the reason for the limitation of liability, involving the deterioration of disease course. Not attending the follow-up for further medical examination for a certain period despite the change of symptoms is a factor of liability limitation related to the patients.

This study had some limitations. First, information on medical records could not be verified because, this study was based on the limited clinical information provided in the official copies of the written judgments. In addition, 7 litigated cases are not sufficient in representing all the medical disputes related to the skin cancer. This suggests that it is necessary to research on the disputes other than the lawsuits, such as registered with the Korea Medical Dispute Mediation and Arbitration Agency. Furthermore,
a future analysis of the new judicial precedents of skin cancer will be needed. However, this study is meaningful in that it is the first paper to systematically analyze the medical disputes related to the skin cancer in Korea by identifying and analyzing all the litigation cases related to the skin cancer in Korea.

In conclusion, the incidence of skin cancer is increasing, and it is expected to lead to more medical malpractice claims in future. Analysis of judicial decision can be helpful to prevent medical malpractices and reduce legal risk for physicians. In order to prevent medical malpractices, a physician should make prompt diagnosis or treatment plans based on appropriate interpretation of the clinical or laboratory results. In all courses of medical practice, informed consent should be obtained with detailed explanation to the patients.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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