

A review of malpractice claims concerning orthopedic applications submitted to the Council of Forensic Medicine

Adli Tıp Kurumu'ndan görüş sorulan ve ortopedi uzmanlık alanına giren tıbbi uygulama hatalarının gözden geçirilmesi

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Amaç: Bu çalışmada, Cumhuriyet Başsavcılıkları ve mahkemelerce Adli Tıp Kurumu'ndan görüş sorulan şikayet konusu olmuş tıbbi uygulamalarda ortopedi uzmanlık alanını ilgilendirenler gözden geçirildi.

Çalışma planı: Ortopedi alanındaki tıbbi uygulama hatalarıyla ilgili düzenlenen, Ocak 2004 ile Aralık 2007 tarihleri arasında 3. Adli Tıp İhtisas Kurulu tarafından değerlendirilmiş ve sonuçlandırılmış olan 174 dosya geriye dönük olarak incelendi.

Sonuçlar: İncelenen dosyaların 129'u travma, 45'i ortopedik nedenli şikayetlerle hazırlanmıştı. Şikayet edilen sağlık personelinin çalıştığı kurumların dağılımı, 82 devlet hastanesi, 56 özel hastane, 17 eğitim-araştırma hastanesi, 18 üniversite hastanesi ve bir askeri hastane şeklindeydi. Bu dosyaların 61'inde (51 travma, 10 ortopedik nedenler) hekim kusurlu bulundu. Kusurlu bulunan hekimlerin çalıştığı kurumlardan 26'sı özel hastane, 24'ü devlet hastanesi, yedisi eğitim-araştırma hastanesi, ikisi üniversite hastanesi idi. Kusurlu bulunan sağlık personelinin ikisi profesör, biri klinik şefi, ikisi doçent, 54'ü uzman, üçü asistan ve biri hemşire idi.

Çıkarımlar: Tıbbi uygulama hatalarını en aza indirmek için, hekimler mesleki bilgi ve becerilerini geliştirmeli, uygulama ve hasta ile ilişkili tüm bilgilerin kaydedilmesine özen göstermeli ve hasta ile yakın iletişim içinde bulunmalıdırlar.

Anahtar sözcükler: Tanı hataları; malpraktis/mevzuat ve içtihat; ortopedi; hekim-hasta ilişkisi; ameliyat sonrası komplikasyon. **Objectives:** The aim of this study was to review malpractice claims concerning orthopedic applications that were sent to the Council of Forensic Medicine by public prosecutors and law courts.

Methods: A retrospective review was conducted on 174 malpractice claim files related with orthopedic applications, which had been examined and concluded by the Third Specialized Board of the Council of Forensic Medicine between January 2004 and December 2007.

Results: Of 174 files, 129 files were concerned with trauma and 45 files were concerned with orthopedic causes. The types of institutions involved were 82 state hospitals, 56 private hospitals, 17 training and research hospitals, 18 university hospitals, and one military hospital. Orthopedic surgeons were found liable for failure in 61 cases (51 trauma, 10 orthopedic cases). Those who were considered blameworthy were working for 26 private hospitals, 24 state hospitals, seven training and research hospitals, and two university hospitals with the following titles: professor (n=2), chief of clinic (n=1), associate professor (n=2), specialist (n=54), resident (n=3), and nurse (n=1).

Conclusion: In order to minimize malpractice claims, physicians should steadily improve professional knowledge and skills, give special attention to documenting all information about the patients and applications, and establish a good and intimate physician-patient relationship.

Key words: Diagnostic errors; malpractice/legislation & jurisprudence; orthopedics; physician-patient relations; postoperative complications.

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Hippocrates, in his nearly 2500 years old aphorism stressed that the priority of the physician was "not to harm" (primum non nocere). While it is assumed that all physicians act according to this undesired consequences may occur as a result of medical practices.^[1] Today, at this point where medicine has achieved parallel to the scientific, social and economic development, expectations of patients from their physicians increased in patient-physician relationships. Consequences arising from the failure to meet the expectations during treatment or failure to achieve the result which is desired to be obtained based on the classical medical knowledge cause reactions from patients. Use of such faults as news by press institutions, whether justified or not, cause health personnel to attract more reaction.

Public prosecutors and law courts refer to experts in order to obtain technical opinion to decide for the wrongful act of the health personnel. Official experts who give opinion about the medical applications in Turkey are Institution of Forensic Medicine, High Council of Health and departments of universities. While the Institution of Forensic Medicine gives opinion to public prosecutors about the files sent by criminal, civil, commercial and administrative courts, High Council of Health can only issue expert opinions for criminal courts. Other judicial authorities than criminal courts (civil courts, prosecution offices, council of state, administrative courts) do not refer to the opinion of High Council of Health. After the Law on the Amendment of the Law of Institution of Forensic Medicine numbered 4810 came into force, all the files sent to the Institution of Forensic Medicine concerning medical application malpractices began to be examined by the 3rd Forensic Medicine Expertise Council.^[2,3] Opinion of General Assembly of Institution of Forensic Medicine is requested in case of objection to the decision.

While this type of files are examined by 3rd Forensic Medicine Expertise Council, first it is investigated whether the intervention complies with the laws. For an intervention to comply with the laws, the following conditions have to be met:^[4]

- The intervening person should be authorized to do so,

- Clarification and consent,

- The intervention should be performed in accor-

dance with the requirements of the profession.

If the intervention complies with the laws, the damage which emerged is investigated. In case of damage, it is assessed whether this arose from the behavior of the health personnel or not.

If there is a relation between damage and the physician, it is assessed whether the damage is a "complication" or "fault".

If it is a complication, it is investigated whether it was anticipated and required measures were taken and appropriate treatment was applied or not. If it is a fault, it is assessed whether the treatment complies with the rules of classical medicine. The assessment includes the following headings:

Diagnosis (selection and application of diagnosis methods),

- Treatment (selection and application of classic treatment method),

- Follow-up (the process of informing the patient).

The assessment process is based on the documents of the patient which are sent by the courts. The Expertise Council requests all films, laboratory analyses, medical documents concerning the institution where the health service was provided (such as observation, daily follow-up form, surgery note, etc.). In the decision phase, medical documents are examined in detail and they directly affect the result. When required, the patient is called to the Council and examined.

At the end of this examination, it is decided whether the health personnel is wrongful or not. The types of faults are as follows:^[5]

Negligence: To do what is not supposed to during the medical intervention. For instance, cutting the sciatic nerve during a total hip replacement surgery.

Imprudence: Defined as insufficiency in preventing a preventable danger, to be late or to forget. For instance, not to perform antibiotic prophylaxis in compound fracture treatment, to start an operation without blood supply.

Inexperience or incapability in profession: Not to know the principles and optimum classical knowledge of the profession and lacking basic skills. Not being able to apply the information in the current professional books.

Carelessness: Not to apply universal medical values as well as carelessness and imprudence. For instance, not to see the patient who requires close observation (plaster follow-up), treating the patient on the phone without seeing them.

Not to comply with orders and regulations: Not to comply with the orders given by the authorized administrative and civilian authority by laws, bylaws and regulations. For instance, not to care for the emergency patient, to apply a non-scientific treatment, not to appear on necessary duty when called, or legal report and registration errors. All such faults are within the scope of "negligent offenses".

Materials and method

Among the files which were investigated for malpractice in orthopedics by law courts and public prosecutors, 174 files which were assessed and finalized by Third Forensic Medicine Expertise Council between 1 January 2004 and 31 December 2007 were analyzed retrospectively. The date of the incident causing the complaint, date of case and judgment dates in the files were recorded and ages and sexes of the patients were defined. Reasons for application to health institutions were analyzed for each individual and health institutions were separated as private, public, training and research and university hospitals. Title of the intervening health personnel was recorded and reasons for complaint of patients to judicial authorities were analyzed. The conclusions reached by 3rd Forensic Medicine Expertise Council were recorded. Reasons were analyzed in cases which were found to be negligent.

Conclusions

Files finalized in 2004

Ninety nine files were finalized in this period. It has been observed that the treatment services which are the subject of complaint were given between 1997 and 2002 and the complaints were made between 1997 and 2003.

All claimant patients were male (average age 33, range, 11-60). One patient was in child age group (11 years). Reason for the patients to apply to a physician was trauma in six patients while it was orthopedic

reasons in three patients.

Five of the centers where the treatment service was provided were public hospitals, four of them were private hospitals. One of the physicians who was complained of was professor while the others were specialists.

Of the nine files analyzed, the physician was found faulty in five. All the physicians who were found faulty were specialists. Two of the health institutions belonged to the Ministry of Health, while three of them to private sector. While diagnosis fault was determined in one case and follow-up fault in two cases, two cases had treatment faults. In cases which resulted with the death of two patients, the physician was assessed as wrongful (Table 1).

Files finalized in 2005

When the 49 finalized files are analyzed, it has been observed that the treatment services which are the subject of complaint were given between 1994 and 2005 and these complaints were made between 1997 and 2005.

35 of the claimant patients were male while 14 of them were female (average age 36; range 1-78). Five of the patients were in child age group (six years or younger).

Reason for the patients to apply to a physician was trauma in 38 patients while it was orthopedic reasons in 11 patients. The distribution of the institutions where the physicians were working in is as follows; 23 public hospitals, 16 private hospitals, five university hospitals, three training and research hospitals and one military hospital.

The physicians who were complained of included one associate professor, 34 specialists, one practitioner and one emergency physician. In 12 of the examined 49 files, the physician was found faulty (Table 1). The reasons of fault were insufficient diagnosis in 1 case and failure in treatment in 11 cases. While no opinion was given in three of the claims which resulted with death of six patients, no physician fault was determined in others. All of the health employees who were found faulty were specialists. The institutions where the health employees who were found faulty were working are as follows: four public hospitals, four private hospitals, two training and research hospitals

Year Case		Responsible Diagnosis		Incident	Result
2004	1	Specialist	The 4 th thoracic vertebra	Late diagnosis	Inadequate diagnosis
			dislocate burst fracture		
	2	Specialist	Foot crush injury	Postoperative sepsis and death	Inadequate follow-up
					After surgical intervention
	3	Specialist	Tibia fracture	Shortness malunion	Professional inexperience in treatmet
	4	Specialist	Femur fracture	Postoperative hemorrhagic shock and death	Inadequate follow-up
					After surgical intervention
	5	Specialist	Femur fracture	Shortness	Professional inexperience in treatment
2005	1	Specialist	Cruris fracture	Shortness	Professional inexperience in treatment
	2	Specialist	Lateral malleolus fracture	Postoperative semi-dislocation	Professional inexperience in treatment
	3	Specialist	Coxarthrosis	Non-cement prosthesis used instead cement prosthesis	Professional inexperience in treatment
	4	Specialist	Supracondillar humerus fracture	Post-plaster Wolkman ischemic contracture	Professional inexperience in treatment
	5	Specialist	Coxarthrosis	Total hip prosthesis applied, dislocation and	Professional inexperience in treatment
	6	C	Ernerun derthle freetens	Revision operation made afterwards	
	6	Specialist	Forearm double fracture	Nonunion	Professional inexperience in treatment
	/	Specialist	Forearm double fracture	Post-plaster compartment and amputation	Professional inexperience in treatment
	8	Specialist	Distal radius fracture	Malunion	Transformed in the second seco
	9	Specialist	Proximal numerus fracture	Pressure on axillary artery, amputation	Teşniste yetersizlik
	10	Specialist	Bulk in finger	Carpal tunnel syndrome operation performed	Professional inexperience in treatment
	11	Specialist	Femur multi-fragmentary fracture	Shortness	Professional inexperience in treatment
	12	Specialist	Ingrown toenail	Finger amputation after forgotten tourniquet	Professional inexperience in treatment
2006	1	Specialist	Collum femoris fracture	Postoperative arthrosis in hip	Professional inexperience in treatment (screw in joint)
	2	Specialist	Femur fracture	CFF fracture during operation	Professional inexperience in treatment
	3	Specialist	Distal humerus Malunion	Nerve damage during operation	Professional inexperience in treatment,
					Negligent action
	4	Specialist	Right hand 3rd EDS cut	Splint not applied after surgery	Insufficient action in treatment
	5	Specialist	Intertrochanteric femur fracture	Nonunion, repetitive operation	Wrong material selection in treatment
	6	Head of clin	ic $_{5-6}$ dislocation with fracture	Not diagnosed, sent home,	Insufficient examination for diagnosis
	_			quadriplegia developed, respiratory arrest and dea	th
	7	Prof. Dr.	Distal femur enchondroma	An area other than lesion area was extirpated	Professional inexperience in treatment
	8	Specialist	Gonarthros	Postoperative kidney failure and death (The medication period applied caused nephrotox	Professional inexperience in treatment icity)
	9	Specialist	Distal radius fracture	Malunion	Professional inexperience in treatment
	10	Specialist	Femur fracture	Malunion, shortness	Professional inexperience in treatment
	11	Specialist	Opere femur fracture plaque	Death during operation	Professional inexperience in treatment
			extirpation	(no anesthesiologists, surgeon responsible)	-
	12	Assoc.Prof.	Peroneal nerve compression syndrome	Wrong extremity was operated	Professional inexperience in treatment
	13	Specialist	Left hand 5 th finger crush wound	Amputation of 5 th finger	Insufficient intervention in treatment
	14	Specialist	Wrist fracture	Malunion	Professional inexperience in treatment
	15	Specialist	Supracondillar humerus fracture	Post-plaster Wolkman ischemic contracture	Professional inexperience in treatment
	16	Specialist	Shoulder dislocation	No diagnosis established in emergency	Inadequate examination for diagnosis
	17	Specialist	Hand cut	Nurse intervention	Negligent behavior of physician in treatment
	18	Specialist	Polio sequela	Nonunion	Professional inexperience in treatment
	19	Specialist	Multi-fragmentary femur fracture	Postoperative shortness	Professional inexperience in treatment
	20	Specialist	Collum femoris fracture	Infection	Negligent behavior of physician in treatment
	21	Specialist	Ulna diaphysis fracture	Nonunion	Professional inexperience in treatment
	22	Specialist	Femur fracture	Plaster, later open reduction and	Insufficient intervention in both
		•		osteosynthesis	treatments
	23	Specialist	Supracondillar humerus fracture	No operation/transfer	Insufficient action in treatment
	24	Specialist	Intertrochanteric femur fracture	No diagnosis	Inadequate examination for diagnosis
	25	Specialist	Gonarthros	Relaxation (faulty prosthesis location)	Professional inexperience in treatment

Table 1. Distribution of cases in which malpractice was determined according to years and their details

Year	Case	Responsib	le Diagnosis	Incident	Result
2007	1	Prof. Dr.	Medial plato fracture	Conservative treatment	Inadequate treatment
	2	Specialist	Acetabulum dislocation with fracture	Inadequate diagnosis	Diagnosis failure
	3	Specialist	Supracondillar humerus fracture	Compartment syndrome	Plaster not applied tightly
	4	Assoc.Prof	Plato tibia 6 grade 2 open fracture	Insufficient action	Wrong treatment selection
	5	Specialist	Gaseous gangrene after Forearm double fracture	Amputation	Antibiotics not given on time
	6	Specialist	Distal radius fracture	Malunion	Inadequate treatment
	7	Specialist Assist. Dr.	Supracondillar humerus fracture	Compartment syndrome	Plaster not applied tightly, insufficient follow-up
	8	Specialist	Amputation in left hand 4 th finger distal interfalangeal joint	Insufficient intervention	Not transferred to microsurgery
	9	Specialist	Left foot 1st finger open fracture	Amputation	Negligent act
	10	Specialist Nurse	Hip fracture	Gas forgotten	Nurse-physician negligent act
	11	Specialist	Supracondillar humerus fracture	Malunion	Insufficient reduction in operation
	12	Specialist	Forearm double fracture	Nonunion	Inadequate treatment
	13	Specialist	Thoracic outlet syndrome	Cervical rib not removed	Treatment failure
	14	Specialist	Coxarthrosis	Total hip prosthesis applied, dislocation afterwards, re-operated	Inadequate treatment
	15	Assist. Dr.	Forearm double fracture	Elbow disarticulation	Treatment follow-up failure
	16	Assist. Dr.	Forearm double fracture	Post-plaster compartment syndrome	Follow-up failure
	17	Specialist	Shortness	Nonunion after limb lengthening operation	Inadequate treatment
	18	Specialist	Femur fracture	Nonunion, shortness	Inadequate treatment
	19	Specialist	Right femur diaphysis fracture, intertrochanteric femur fracture	Femur plaque hip DHS	Inadequate fixing

Table 1 (Cont). Distribution of cases in which malpractice was determined according to years and their details

Files finalized in 2006

72 files were finalized in this period. It has been observed that the treatment services which are the subject of complaint were given between 1997 and 2006 and the complaints were made between 2001 and 2006.

49 of the claimant patients were male while 23 of them were female (average age 32; range 1-77). 15 of the patients were in child age group (10 years or yo-unger).

Reason for the patients to apply to a physician was trauma in 51 patients while it was orthopedic reasons in 21 patients

35 of the concerned health services were given in public hospitals, 22 of them in private hospitals, nine of them in university hospitals and seven in training and research hospitals.

The physicians who were complained of included three professors, four associate professors, two assistant professors, 60 specialists, two residents (together with the specialist in one case) and two heads of clinic. Physician was found faulty in 25 of the files examined. Reasons of fault were diagnosis failure in two cases and treatment failure in 17 cases. In three of the claims which resulted with the death of eight patients, physician fault was determined. The institutions that the physicians who were found faulty were as follows: 12 public hospitals, 10 private hospitals, two training and research hospitals, one university hospital. The health personnel who were found faulty included one professor, one associate professor, one head of clinic and 22 specialists (Table 1).

Files finalized in 2007

It has been observed that the treatment services which are the subject of complaint in 44 files finalized in this period were given between 1994 and 2006 and the complaints were made between 1998 and 2007.

36 of the claimant patients were male while eight of them were female (average age 32; range 1-78). 10 of the patients were in the child age group (11 years or younger). While the reason for seeking medical advice was trauma for 34 patients, it was orthopedic reasons in 10 patients. The institutions that the physicians were employed in consisted of 19 public hospitals, 14 private hospitals, four university and seven training and research hospitals. The health personnel who were complained of included one professor, one associate professor, 38 specialists, four residents (together with two specialists), one nurse (with specialist), one head of clinic, two practitioners (together with one specialist).

Physicians were found faulty in 19 of 44 examined files. Reasons of fault were diagnosis failure in one case and treatment failure in 18 cases. Physician fault was not determined in any of the cases which resulted with the death of four patients. Nine of the physicians who were found faulty were employed in a private hospital, six in a public hospital, three in a training and research hospital and one in a university hospital. The health personnel who were found faulty included one professor, one associate professor, 15 specialists and one nurse (Table 1).

When the general assessment of the examined files was conducted, 174 files concerning orthopedics were analyzed by the 3rd Specialization Council between 2004 and 2007, the first application reasons of claims were trauma in 129 cases and orthopedic reasons in 45 cases. While the health personnel was found faulty in fifty one trauma cases, health personnel was found faulty in 10 orthopedic cases..

The institutions that the physicians who were complained of were as follows: 82 public hospitals, 56 private hospitals, 17 training and research hospitals, 18 university hospitals and one military hospital. 26 of the institutions that the faulty physicians were employed in were private hospitals, 24 were public hospitals, seven were training and research hospitals and two were university hospitals.

Titles of the health personnel were; five professors, six associate professors, two assistant professors, three heads of clinic, 152 specialists, one emergency medicine physician, six residents, three practitioners, one nurse. The faulty health personnel included two professors, one head of clinic, two associate professors, 54 specialists, three residents and one nurse.

Discussion

It is natural that to some extent some complications occur after surgical applications. When the concerned health personnel is involved in the occurrence of complications or when those consequences which are not considered as complications occur during the application of treatment service, this is referred to as malpractice.

The number of claims against physicians in the USA has increased dramatically since 1960s. today, the number of malpractice claims brought against orthopedists in the USA is as high as thousands.^[6] In parallel with the developing economic, social and cultural level in our country, the expectations in health sector have also increased. The cases where health personnel is complained of, or number of physicians who experience legal proceedings because of malpractice have been increasing. It is difficult to obtain data either because of professional responsibility, insufficient structure of insurance system and registration or difficulty of access to the records and results of criminal courts. In Tümer's study [7], data from High Council of Health were considered as the most reliable resource. Specialization in orthopedics is listed as the specialization with highest number of complaints after general surgery and obstetrics and gynecology. In most of the orthopedics cases examined by the High Council of Health, health personnel were found faultless. When the files of claims for damages among the files within the scope of our study were analyzed, it was found that eight cases which were found faulty were assessed by the expert during prosecutor's investigation and the opinion was that prosecution is not required.

Compliance of a surgical operation with laws depends on the authority of the person who intervenes, existence of clarification and consent and the requirement that the intervention is performed in accordance with the principles of profession.

In only one of the files examined, failure of the health personnel was determined concerning the consent form and/or consent of the patient. Adequate clarification of the patient and taking their consent does not remove the obligation of the physician against the complications which may occur after intervention.

Most of the interventions which are subject to complaints were applied because of trauma. Primary reasons of complaint of patients were inability of the limbs to achieve their previous functions. Although perfect results may be obtained after trauma treatment according to medical rules, it is a natural consequence that the pre-injury functions cannot be fully achieved in orthopedic trauma cases. Patients lose the normal functions they used to have as a result of the trauma. The differences in the expectations of the patients may

be a reason of complaint. As a matter of fact, in the examined files, the physicians were found faultless in complaints concerning disability or arthrosis definitions which are expected after treatment. In trauma cases, preparation of the physician in accordance with elective facts and period of assessment of the patient is limited. Diagnosis methods and the time given by the physician to the patient for diagnosis may be insufficient. Combined with careless behavior, such conditions make it inevitable to determine faults or failures in diagnosis. On the other hand, emergency working conditions of the physicians in our country, number of patients per physician, number and of equipments required for examination are also matters of debate. Patients in orthopedic cases already have a dysfunction because of diseases as in hip or knee arthrosis. Achieving a degree of functionality better than their current condition after surgical intervention they undergo would be enough to make them happy instead of a perfect result. For instance, decreasing the pain of a patient with hip prosthesis even by half would be satisfactory for the patient. Orthopedic cases have many advantages also for the surgeon. They have adequate time and options for pre-operative preparation, material supply and team building.

Public hospitals were uppermost among the institutions which were complained of. According to the database of Republic of Turkey Ministry of Health, it is obvious that the order would change taking into consideration the number of patients served.^[8]

Private hospitals were found to have the highest number of faults. The general opinion is that the private health institutions have better care and service for the patients.

Most of the time, the motive to prefer such institutions is the fact that their inpatient services are better and they have better degree of communication with the physician compared to public institutions. On the other hand, except for a certain number, technical opportunities of the private health institutions in our country is worse than those of state hospitals. Moreover, usually the number of orthopedists in private hospitals is one. This causes the physicians to be alone in the treatment process of some cases which are complicated and difficult to treat. The need for the opinion and/or professional skills of a more experienced colleague, reluctance of the patient concerning the transfer to a higher institution or reluctance of the physician thereof may cause malpractice in the treatment process. It is a well known fact that the group of patients receiving services of private health institutions are of high level in socioeconomic and cultural terms and this group of patients covers the most of the health service costs themselves. Such factors increase the expectations of the patient group as well as their awareness to claim their rights.

It is acknowledged that the difference of working conditions between institutions, number of employed health personnel and the social, educational and economic levels of the group of patients served should also be taken into consideration. In the files examined, it was not possible to obtain information about the socioeconomic level, occupational group and level of education of the group of patients and therefore their communication with the physician during treatment; however, it is a fact that these factors contribute to the treatment process. Although it may seem a subjective assessment to investigate the adaptation of the patient to the treatment and whether they comply with the recommendations of the physician, medical records and writing the recommendations concerning the treatment constitute the essential evidences for the defense of the physician.

In order to avoid malpractice in health services, the meaning of malpractice should be well understood. In short, insufficient or incorrect application of standard diagnosis, treatment and follow-up as acknowledged according to current medical knowledge and consequent harm to the patient is defined as malpractice. Those which are accepted as "standard" are the methods of diagnosis, treatment and followup included in current reference books in orthopedics and traumatology. After this point, experts and institutions step in about the assessment of the actions. Avoidance of the health personnel from malpractice, depends on the knowledge of the physician about the basic principles in their subject of profession and improving thereof with up to date information.

The physician should not avoid to send the patient to university or training and research hospitals in complicated cases where he thinks that he does not have sufficient experience and skills.Establishing a good communication with the patient is another basic element to avoid complaints.^[3]

Communication established with the patient during the diagnosis, treatment and follow-up phases; talking

with the patient about possible treatment methods and complications in detail consolidates patient-physician relationship.^[9] When the patient is not listened adequately and the complaints were not analyzed, diagnosis or treatment failures are inevitable. On the other hand, negative opinion of other health personnel who is not involved in the treatment about the treatment and the one who is performing the treatment may cause tension in physician-patient relationship. In complaint cases arising from the fault of the health personnel or in conditions where he is faultless, the only source of defense of the physician is the medical records. ^[8] Medical record should be prepared with care and in complete starting from the moment that the patient referred to the health institution. Recording the clarification and consent of the patient which makes the intervention to the patient legally justifiable is a must. Complaints of the patient other than the reason of application should definitely not be ignored before treatment. For instance, it should be told to the patient that in a patient with rheumatoid arthritis, union may be delayed or in a patient with diabetes extraordinary scar conditions may appear. The patient should be approached systematically before intervention. All information concerning the local examination should be recorded and it should be made sure that the graphs to be requested comply with medical rules and that they are recorded. Surgical intervention records should be complete. It might be the only evidence for a physician that he showed professional care that it is recorded that neurovascular structures were handled with care and protected while placing retractors. One should pay attention to record all postoperative physical examination symptoms, records of medicine and other branch physicians (consultation notes, etc.). When the heparin preparation with low molecular weight applied for prophylactic purposes is not recorded, the physician becomes directly liable in tromboembolic cases. It is also under the responsibility of the physician that the controls and recommendations made following the discharge of the patient (not to

lean, splint usage, etc.) are recorded.

In cases which are treated by non-surgery methods in our country (such as plaster, splint, etc.) many deficiencies are observed in terms of medical records. Record of neurovascular status of the patient, record of symptoms such as shortness or rotation in graphs are very important. One of the primary measures which should be taken in order to minimize the malpractice is that physicians improving their professional knowledge and skills and keep their communication with the patient at a high level. Obviously it would be beneficial if the specialization associations arrange more seminars and inform the physicians concerning these matters.

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