

Epilepsy in Supreme Court Decisions

Yargıtay Kararlarında Epilepsi

Pınar Uzun Uslu¹, Aslı Tekin²
¹Eskisehir City Hospital, Clinic of Neurology, Eskisehir, Türkiye
²Eskisehir Bar Association, Eskisehir, Türkiye

Abstract

Objective: Epilepsy is one of the most common neurological diseases and is a chronic disease that affects the patient for life. In addition, the fact that there may be changes in consciousness in an individual with epilepsy carries them to a different legal dimension in cases such as accidents, uncorrected proof 2 crimes, and injuries. This study aimed to investigate how often epilepsy appears and how it plays out in the decisions of the supreme court.

Materials and Methods: Data scanning for the study was conducted using the National Judicial Network Information System (UYAP). Cases containing the word "epilepsy" were scanned in all case files in the UYAP system covering 2000-2021. The subjects of the cases were examined in terms of illness, with the findings recorded in the data search file.

Results: A total of 428 files containing the word "epilepsy" were identified in the UYAP system. Among them, 231 records pertained to 2016-2021, 129 to 2010-2015, and 68 to 2000-2009. There were a total of 232 files pertaining to penal departments and 171 to law departments.

Conclusion: The rights of adults with epilepsy in their working life and the situations they are exposed to during marriage and divorce may differ from the norm. Furthermore, the conditions for holding a driver's license differ, and if a license is obtained, the situation regarding an accident involving an individual with epilepsy is legally evaluated differently. Whether individuals with epilepsy have the right to be deemed disabled and the requirements for guardians or legal counsel during legal proceedings are determined by law and decided by physicians. The laws and regulations are standard, but the clinical, psychiatric, and mental status, as well as the conditions of each epileptic patient may be different. This study was conducted to determine how the condition of epilepsy plays out in the Turkish legal system. Knowing the existing forensic examples will help us better understand the legal dimension of this disease.

Keywords: Epilepsy, law, regulation, driver, divorce

Öz

Amaç: Epilepsi sık görülen nörolojik hastalıklardan biridir. Epilepsi kronik bir hastalık olup hastayı yaşam boyu etkilemektedir. Ayrıca epilepsili hastada bilinç değişiklikleri olabilmesi kişiyi kaza, suç, yaralanma gibi olaylarda hukuksal açıdan farklı boyuta taşımaktadır. Bu çalışmada yargıtay kararlarında epilepsinin ne sıklıkla ve nasıl yer aldığı araştırılmak istenmiştir.

Gereç ve Yöntem: Çalışma için veri taraması Ulusal Yargı Ağı Bilişim Sistemi (UYAP) üzerinden yapıldı. UYAP sisteminde 2000-2021 yılları arasında yer alan tüm dava dosyalarında "epilepsi" sözcüğünü içeren davalar tarandı. Davaların hastalık açısından konuları incelendi. Bulgular veri tarama dosyasına kayıt edildi.

Bulgular: Uyap sisteminde "epilepsi" kelimesini içeren 428 dosya olduğu görüldü. 2016-2021 yılları arasında 231 kayıt, 2010-2015 yılları arasında 129 kayıt, 2000-2009 yılları arasında ise 68 kayıt vardı. Ceza dairelerine ait toplam 232 dosya, hukuk dairelerine ait ise 171 sonuç vardı.

Sonuç: Epilepsili bireylerin çalışma hayatlarındaki hakları, evlilik ve boşanma sırasında maruz kaldığı durumlar normalden farklılık gösterebilmektedir. Ayrıca ehliyet sahibi olma şartları, ehliyetleri var ise kaza yaptıklarındaki durumlar hukuksal olarak farklı olarak değerlendirilir. Yine epilepsi hastalarının engelli hakkına sahip olup olmadıkları, yasal işlemler sırasında vasi ya da yasal danışman gereklilikleri yasalarla belirlenir ve hekimlerce karar verilir. Yasa ve yönetmelikler standarttır ancak her epilepsili hastanın kliniği, psikiyatrik ve mental durumu, koşulları farklı olabilir. Bu çalışma epilepsinin Türk hukuk sisteminde nasıl yer aldığını belirlemek için yapılmıştır. Mevcut adli örneklerinin bilinmesi epilepsinin yasal boyutunu kavramada bizlere kolaylık sağlayacaktır.

Anahtar Kelimeler: Epilepsi, yasa, yönetmelik, sürücü, boşanma

Address for Correspondence/Yazışma Adresi: Pınar Uzun Uslu MD, Eskisehir City Hospital, Clinic of Neurology, Eskisehir, Türkiye Phone: +90 222 611 40 00 E-mail: drpinaruzun@gmail.com ORCID: orcid.org/0000-0002-6231-3892 Received/Geliş Tarihi:: 23.10.2022 Accepted/Kabul Tarihi: 18.03.2023



[©]Copyright 2023 by the Turkish Neurological Society / Turkish Journal of Neurology published by Galenos Publishing House. Licensed by Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND) International License.

Introduction

Epilepsy is one of the oldest known diseases in human history (1). According to World Health Organization data, there are approximately 50 million individuals with epilepsy worldwide (2). The prevalence of lifelong epilepsy is 4-10/1,000 in developed countries, and 18.5/1,000 in developing countries (3). Individuals with epilepsy are predisposed to psychiatric disorders, with depression, anxiety disorders, and personality disorders observed more frequently in such individuals than among the general population (4). The fact that individuals with epilepsy have these psychiatric comorbidities or that some have a low mental capacity may increase the crime rates (1). Meanwhile, crimes committed as a result of loss of consciousness can be evaluated within the scope of not perceiving the legal meaning and consequences of the act committed due to mental illness within the scope of article 32 of the Penal Code of Türkiye (TCK). This can be used by the accused as an excuse in the defense of mental illness (5). There is no legal obstacle to the marriage of individuals with epilepsy. However, the stigma attached to the illness may prevent them from getting married (6). For this reason, the individual with the disease can hide their premarital illness, which can lead to problems following marriage. While individuals with epilepsy could not get a driver's license until 2021 in Türkiye, the attendant regulations have changed and individuals who meet certain conditions can now obtain a license. Therefore, it has become more important to know the traffic accidents in which epileptic individuals are involved, as well as their consequences, from a legal perspective. An issue as important as treating individuals with epilepsy relates to mastering the social and legal problems they face. This study was designed with this purpose in mind.

Materials and Methods

Data scanning for the study was performed using the National Judicial Network Information System (UYAP). Cases containing the word "epilepsy" were scanned in all case files in the UYAP system covering 2000-2021. The names of the individuals or organizations that were the subject of the lawsuit were kept confidential within the scope of personal data protection regulations. The subjects of the cases were examined in terms of illness, with the findings recorded in the data search file. Since only the distribution and contents of the data were evaluated, statistical analysis was not performed.

Results

When the cases containing the word "epilepsy" were searched under the title of Supreme Court in the UYAP system, a total of 428 files were identified, including 231 for 2016-2021, 129 for 2010-2015, and 68 for 2000-2009. Here, it is important to explain the following. The Supreme Court is divided into two parts, namely "crime" and "law." There are chambers in each section. In the Court of Cassation, the civil chambers constitute the General Assembly of Civil Chambers, and the criminal chambers constitute the General Assembly of Criminal Chambers. The assembly formed by all the criminal and civil chambers of the Supreme Court is called the Grand General Assembly. When an application is made to the Court of Cassation against the decisions of the courts of first instance, the relevant chamber of the Court of Cassation examines the decision of the first instance court, reverses the decision if it finds it unlawful, and approves it if it finds it lawful. In the case where the decision of the court of first instance is reversed, the court of first instance either complies with or resists the reversal decision. The decision of the first-instance court to resist is examined and decided either by the General Assembly of Criminal Chambers or the General Assembly of Civil Chambers, depending on the nature of the case. Both the court of first instance and the Court of Cassation must comply with the decision of the General Assembly. For this reason, the case files are grouped as cases in the criminal chambers, cases in the general assembly of criminal chambers, cases in the civil chambers, and cases in the general assembly of civil chambers.

Cases in Criminal Chambers

A total of 232 files containing the word "epilepsy" that pertain to criminal chambers were identified (Table 1). In 146 of these files, the defendant's claim to have epilepsy and the question of criminal liability related to cases of theft, sexual abuse, willful injury/ killing, and damage to property. In 23 cases, the word epilepsy was used to indicate that the victim was unable to defend himself/ herself due to epilepsy, and that the penalty was aggravated when such persons were attacked/abused/robbed, or that the person was incapable of resisting the act in question. While it was used to describe the person in 13 cases, it had no effect on the case. In 13 cases, there was the claim that post-traumatic epilepsy (PTE) development and disability increased following a work accident, traffic accident, or assault. Loss of consciousness while driving and epileptic seizure were cited as the defense in nine cases. In one of these, the driver was considered to be within the scope of conscious negligence, i.e., committing a crime by negligence through driving despite knowing the probable consequences (hiding their epilepsy and acting against the driving regulation (before September 29, 2021). In other cases, there was no known epilepsy, and the drivers were directed to neurologists for investigation of the condition. Six criminal case files were malpractice cases, and it was found that individuals who developed epilepsy were the subject of lawsuits. In two of them, the development of epilepsy following brain tumor operation and death were the cause of the lawsuit. In another case, the death of a patient with cerebral palsy and epilepsy following cesarean section, as a result of infection and non-convulsive status epilepticus, was examined within the scope of malpractice. Nine cases were related to the abuse of antiepileptic drugs. In some of these cases, it was seen that fake medical reports or prescriptions

Table 1. Epilepsy in cases pertaining to criminal chambers	
Cause of action	Frequency (n = 232, %)
To question criminal liability	146, 62.9%
To aggravate the penalty	23, 9.9%
Occurrence of post-traumatic epilepsy	13, 5.6%
Being used as a description	13, 5.6%
Causing a traffic accident	9, 3.8%
Epilepsy as a cause of easy deception	9, 3.8%
In property practice cases	7, 3%
In cases of forged document issuance	6, 2.5%
Other	6, 2.5%

were issued to obtain antiepileptic drugs. In one case, it was a case of a convict stealing antiepileptic drugs containing phenobarbital from another convict. Another case involved being defrauded while looking for a bride for a young person with epilepsy, seven cases involved the claim that the victim was deceived due to epilepsy, and four cases involved defrauding individuals with epilepsy with the promise of non-medical treatment.

Cases in the General Assembly of Criminal Chambers

When cases pertaining to the general assembly of criminal chambers were examined, 16 cases that included the word "epilepsy" were identified. In seven of these cases, the description of the person was in question, and it was found that it had no effect on the case. In four cases, the victim's inability to defend himself/ herself due to epilepsy and the aggravated penalty of the culprit due to assault/abuse/theft were brought forward for evaluation. In three cases, the culprit's claim to have epilepsy and a request to question his/her criminal liability were noted as a defense justification in the cases of qualified theft and willful bodily injury. There was a claim involving a green prescription drug for epilepsy in one case related to PTE and in one related to a drug offense. It was found that the drug in question was clonazepam.

Cases in the Civil Chambers

Following the search using the term "epilepsy," 171 cases pertaining to civil chambers were identified (Table 2). Among them, 29 related to guardianship/borrowing capacity, and it was observed that diseases such as mental retardation and dementia were included in addition to epilepsy. Furthermore, according to the subject of the case, factors such as the time between the event and guardianship and witness statements were also taken into consideration. Eighteen of the search results included epilepsy as a description in unrelated witness statements. Twelve lawsuits were filed for marriage annulment. In one of these cases, it was claimed that the other party concealed their epileptic condition before marriage and that the plaintiff learned about this situation after the defendant had a seizure in the second week of their marriage. Nine cases involved the plaintiff's request to increase the alimony due to having a child or due to the defendant's epilepsy, and two cases involved the request to limit the personal relationship involving an epileptic parent or an epileptic child. Here, the ideas of pedagogues, sociologists, and psychologists were used. In four cases, it was argued that the person in question could not work due to epilepsy, could not pay the alimony due to being poor, or objected to the alimony payments. In one case, the effort to adopt a child with epilepsy and mental disability

Table 2. Epilepsy in cases pertaining to civil chambers	
Cause of action	Frequency (n = 171; %)
Occurrence of post-traumatic epilepsy	55, 32.1%
Requiring guardianship	29, 16.9%
Other	29, 16.9%
Being used as a description	18, 10.5%
In cases of alimony	15, 8.7%
Dispute between worker and employer	13, 7.6%
Divorce or marriage annulment	12, 7%

was the subject of a lawsuit due to the possibility of secondary gain. In one case, a child who had a seizure at school fell out of the classroom window, and the plaintiff's compensation for loss of work was evaluated by determining the responsibility of the owner of the building. In a divorce case, it was claimed that the defendant could resort to violence during epileptic attacks and suffered from epileptic psychosis. In 55 cases, the development of PTE following a traffic accident or work accident increased the individual's disability, which led to a claim for compensation. Four cases involved malpractice. In one case, the cabin crew were told that the individual in question did not have epilepsy after their electroencephalogram (EEG) was recorded while receiving a medical board report before a flight abroad, but the individual was subsequently diagnosed as having the condition. In this case, the plaintiff applied for pecuniary and non-pecuniary damages for the period that they could not work due to the above; this case has not vet been concluded.

In one of the civil cases, the employment contract of a worker, who was deemed to be unable to do heavy or dangerous work due to the development of epilepsy during health check-ups, was terminated, but it was ruled that the plaintiff was entitled to compensation. In all seven cases, claims for compensation were made by individuals with epilepsy who were dismissed from work. In some of these cases, the employer was in the right, as non-illness factors were proven. In one case, it was seen that the epilepsy patient resigned from his job but had a claim for compensation. This patient was suspected of mental retardation and it was understood that mental tests were needed for the course of the case. In another case, the plaintiff, a cashier, stated that they had epilepsy and could be careless, but it was proven that they had committed fraud through camera recordings and accounts. In another case, a worker with epilepsy who had a seizure at work sued the employer for non-pecuniary damage because they were forcibly taken to hospital and given a drug test. However, no fault was found on the part of the employer. In one case, there was a request for reimbursement of the damage caused by the changes in the rate of disability between the institutions or between the work periods, in the case of the coexistence of epilepsy and other diseases. In two cases, there was the allegation that the individual with epilepsy who had seizures at work did not work in a category suitable for them. In three cases, the disability rates and claims regarding epilepsy and additional diseases were in question.

In a further three cases, the plaintiff claimed that the seizure caused by epilepsy and the trauma related to the seizure should be deemed a work accident. In two civil cases, it was recommended to investigate whether the worker who had an accident at work experienced a loss of consciousness that may have caused the accident, with the possibility of epilepsy specifically investigated. In two different civil cases, a nightshift worker was found dead, and in these cases, the cause of death could not be finalized in the courts. In a further case, an objection was raised regarding the rate of disability received due to epilepsy.

In a case in the 9. civil court, it was determined that the plaintiff could be employed in jobs that did not require attention in the medical board report they received after contracting a disease after working a long period of time at the defendant's workplace. It was stated that the employer did not allocate the worker duties in accordance with the report and had asked the plaintiff to return to work once they had recovered. In this case, it was decided that the plaintiff was entitled to notice compensation in accordance with article 17/1 of the labor law 1,475 and in consideration of the practices of the legal department in this regard.

Five cases in the civil chamber were related to a traffic accident, wherein the insurance company, which claimed that the drivers with epilepsy had an accident due to a seizure, tried to exclude the accident from the scope of the insurance. However, most of the accidents were not associated with epileptic seizures. In all three civil chamber cases, it was investigated whether an event related to life insurance and personal accident insurance was affected by epilepsy, and no relationship was found. Finally, three cases concerned the branding and patenting of antiepileptic treatments.

Cases in the General Assembly of Civil Chambers

Among the general assembly cases (9 results), it was stated in one divorce case that the plaintiff had epilepsy and had difficulty in earning money in view of reducing the demand for alimony from the defendant. In two cases, the plaintiff claimed that the defendant concealed their epilepsy and thus demanded the annulment of their marriage. In two cases, epilepsy was put forward to increase the support allowance. One case involved fraudulent sales and the statement that the plaintiff was easily deceived because they had epilepsy. In another case, epilepsy was included within the scope of malpractice as birth with asphyxia and the development of epilepsy in the child. In one case, there was a demand for payment of round-trip travel fees for referral to higher centers due to epilepsy, and in another case, there was a demand for the development of PTE after an occupational accident to be considered in the compensation to be paid.

Discussion

The research revealed that the criminal cases related to epilepsy were mostly aimed at questioning criminal liability. Article 32 of the TCK states the following:

A person who cannot perceive the legal meaning and consequences of the act he/she has committed or whose ability to direct his/her behavior in relation to this act has significantly decreased due to mental illness is not punished. However, a security measure shall be imposed on such persons (2).

A person whose ability to direct their behavior in relation to the act they had committed had decreased (while the degree is not stated in the first paragraph) should be sentenced to 25 years instead of aggravated life imprisonment, and 20 years instead of life imprisonment. "The penalty to be imposed in such cases can be reduced by no more than one sixth. The sentence can also be applied partially or completely as a security measure specific to mental individuals, provided that the duration is the same".

Individuals with epilepsy who experience seizures with loss of consciousness can be evaluated within this context. However, in individuals with epilepsy without seizures involving loss of consciousness, epilepsy can also be used for legal defense purposes. Therefore, it is important to fully understand these cases and the attendant consequences. In addition to the possibility of confusion, the concepts of epileptic personality or epileptic guilt are also discussed in the literature (7). Lombroso, who identified with these concepts, first noted that pathological personalities may relate to certain physical findings (8). In an 1884 case of a soldier with epilepsy who killed seven of his comrades, his epilepsy was associated with guilt (9). Today, however, the

concept of epileptic guilt has lost its validity. With the increase in neuroimaging methods, epilepsy has become more understandable both in semiological and neuropsychiatric terms. As such, the concept of epileptic personality is discussed more predominantly. Epileptic personality traits include aggression, sexual attitude changes, decreased emotionality, addiction, elation, feelings of guilt, emotional lability, seriousness, hypergraphia, hyper or hypomoralism, irritability, obsession, paranoia, philosophical interest, and religious fondness (10). However, personality disorders are also more common among individuals with epilepsy. The rate of personality disorders in partial epilepsy has been reported to be 13%-35% (11,12,13), while it has been reported that this rate increases to 18%-42% among individuals who are candidates for surgery or who have undergone surgery (14,15). The personality disorders reported to affect epileptic individuals include antisocial personality disorder, avoidant personality disorder, obsessive compulsive personality disorder, schizoidtype personality disorder, schizotypal personality disorder, and dependent personality disorder (11,12,13,14,15,16). An individual with epilepsy may commit a crime due to their current personality structure and personality disorder, if any, or they may commit a crime due to ictal/postictal consciousness disorder, albeit with a low probability. In the criminal cases examined in the present study, the aim was to reach a conclusion regarding whether the person with epilepsy could perceive the legal meaning and consequences of the act they had committed. Determining whether there was a loss of consciousness due to epilepsy in these cases, as well as how the event occurred, camera recordings, eyewitness statements, and the relationships between crime and causation are also extremely strong determinants. In other words, forensic medicine and psychiatry experts must be included in these legal processes. Furthermore, neurologists should determine which epileptic syndrome the patient is affected by, anamnesis and medications should be learned, and EEGs, video EEGs, and magnetic resonance imaging scans should be performed. If ictal or postictal violence is considered, the following five criteria suggested by Treiman (17) can be used: the person has a previous diagnosis of epilepsy, video EEG recordings of epileptic automatism, video EEG recordings of aggressive behavior, aggressive behavior being characteristic of the individual's seizures, and the violence being considered as part of the seizure. Crimes involving ictal or postictal violence are limited to case reports. The treatment of ictal or postictal severity is primarily prevention with seizure control. When the seizures cannot be completely controlled, a sensible triple therapy approach can be adopted. First, family, close friends and, if possible, colleagues should be aware of the individual's seizure semiology, postictal behaviors, and the risk of postictal violence. They must know how to react during the postictal state to minimize the risk of harm to themselves or the individual. Second, no weapons, such as firearms, or tools such as cutting-drills or sticks should be easily accessible for use as weapons at home or in the workplace. Third, acute treatment with benzodiazepine should be considered during or immediately after a seizure to prevent or reduce the severity and duration of the postictal state. Ideally, the family and, perhaps, close friends of the individual should be trained to administer an appropriate parenteral formulation in the case of a seizure, such as orodispersible tablets, nasal spray, or intramuscular injection, if the patient permits. Since the efficacy of benzodiazepines in preventing exacerbation of the severe postictal condition has

not been empirically proven, their use should be adjusted to the clinical situation of each patient (18). In addition, in line with the current directive on the procedures and principles of health reports dated 20.10.2020 and numbered 54567092-010.04-4959, individuals with epilepsy cannot obtain a license to carry or possess a gun. It is thought that this directive is a factor that reduces the conscious or unconscious delinquency of individuals with epilepsy.

In the present research, it was observed that the second most common aspect in criminal cases involving the word "epilepsy" pertained to the defense of the victim with the aim of increasing the sentence. According to article 102 of the TCK, the victim's inability to defend themselves physically or mentally is an aggravating factor in sexual assault crimes, while in article 142 of the TCK, it is stated that committing theft when the victim is unable to protect their property is a reason to increase the penalty. In other words, crimes committed against people during seizures involving unconsciousness may result in an increase to the current penalty. The main point here relates to benefitting from the fact that the person whose property has been stolen is unable to protect their property due to a specific factor. This aggravating factor is accepted since it would be easier to commit the crime of theft in cases of unconsciousness, panic, sudden fainting, epileptic seizure, death of a family member, or following an accident, apart from in events such as fires or explosions (19).

One of the common litigation issues is related to PTE. Recurrent seizures secondary to traumatic brain injury are termed PTE (20). Seizures occurring within the first 24 hours following head trauma are defined as acute seizures, seizures occurring within 24 hours-one week are defined as early PTE, and seizures occurring after the first week are defined as late PTE. While early seizures develop secondary to brain damage, oxidative stress mechanisms are prominent in the development of late seizures (21). The risk of developing PTE has the highest rate in the first year following head trauma (22). In a previous study, it was reported that the first seizure was observed in approximately 80% of the individuals with late PTE within the first 12 months following the trauma, with the seizures occurring in more than 90% of the individuals until the end of the second year (23). The recurrence risk of seizures occurring within the first week following trauma is low, while the risk of seizure recurrence is high in seizures that occur at a later point (24). The development of PTE is associated with the severity of the head trauma (23). The risk factors for PTE include advanced age, penetrating injuries, serious trauma (Glasgow coma scale score ≤ 10), biparietal or multiple contusions, intracranial hemorrhage \geq 5 mm in frontal or temporal localization causing midline shift, coma duration of >24 hours, prolonged post-traumatic amnesia, and the occurrence of early post-traumatic seizures (25). The legal decisions pertaining to epilepsy are generally left to neurologists, even if involving PTE. When making a decision regarding PTE, a disability rate should be determined by considering the presence of epileptic seizures, when the seizures started, the frequency of the seizures, neuroimaging, and EEGs. In the cases identified in the present study, it was observed that the disability aspect of PTE, which emerged following a work accident, traffic accident, or assault, was one of the important determinants for both the defendant and the plaintiff.

While, as noted above, individuals with epilepsy could not obtain a driving license under any circumstances in Türkiye before 2021, the regulation was amended due to the results of studies conducted in other countries and the literature-based efforts of associations such as the Turkish Epilepsy Society. The amendment to the regulation on the health conditions and examinations to be sought among candidate drivers and current drivers was published on 29 September 2021. Herein, the following is stated: Individuals with loss of consciousness, without loss of consciousness, with evoked or unprovoked epileptic seizures, if they document that they have had a neurology examination every 6 months, and that they have not had a seizure for three years without medication or while using at most two antiepileptic drugs, their situation is evaluated by the neurology health committee. If individuals who have had their first or one unprovoked epileptic seizure document that they have had a neurology examination every six months, they have not had a seizure for two years, and they have not used antiepileptic drugs, their situation can be evaluated by the neurology health committee. Those who meet these conditions and are approved by the neurology health committee have become licensed.

In the present study, it was found that no case was opened following the regulation changes. In criminal cases that occurred prior to the new regulation, cases were filed against people involved in accidents who were drivers despite having epilepsy. This may still be the case for people with epilepsy who drive without a license. Meanwhile, in cases where an individual who is not known to have epilepsy but is thought to have had an accident due to a loss of consciousness (first seizure?), in addition to medical evaluations, how the event occurred, camera recordings, eyewitness testimonies, speed limits, tachograph use, and alcohol consumption are important criteria. Regarding the cases involving traffic accidents and epilepsy-related events in the civil chambers, the insurance companies claimed that the accident should be excluded from the insurance coverage since the driver was believed to have epilepsy. However, it is expected that such lawsuits filed by insurance companies for drivers who have obtained a license in accordance with the new regulation will not be repeated.

While the new regulation is highly valuable in terms of the rights of individuals with epilepsy, it may cause some unease among physicians. However, it should be noted that publications have reported that the frequency of death or death caused by epileptic drivers is not a great deal different from that among the general population (26,27). In a study that examined the traffic records of epileptic individuals with a driving license in Japan, it was found that nine of the 98 individuals (9%) had had traffic accidents, 89 had never had an accident, and none had had an accident as a result of seizures (28). In another recent study, there was not enough evidence for an increase in the probability of a traffic accident among individuals with epilepsy, since many factors (medication adherence, average mileage traveled, etc.) could affect the methodology (29). As a result, in the countries where these studies were concluded, the most important factor in obtaining a driving license for individuals with epilepsy is the seizure-free period, which is now the most important criterion that ensures eligibility in Türkiye.

What appears to concern neurologists the most is their doubt regarding the reliability of this seizure-free period. However, the fact that people are obliged to know their legal rights and limitations should not be ignored. In other words, an epileptic individual applying for a driving license must be aware of the regulation. However, the question remains as to how the phrase "if they document that they have not had seizures" in the regulation should be understood. According to the Turkish Language Institution, the term "document" is defined as "writing, photographs, pictures, film, etc. that bear witness to a fact." We believe that the concept of "document" should be fully clarified.

Today, most documents can be created and stored electronically. For example; before applying for a driver's license, the individual must fill out a personal health information form via the e-government site. Here, the individual is asked to report whether they have epilepsy. We believe that adding an additional tab here that requests information regarding seizure frequency or the date of last seizure will ensure the individual's official declaration and will partially reduce the responsibility of the physician. In fact, the common problems include that individuals with epilepsy do not remain under regular outpatient control and that the medical records are insufficient.

Meanwhile, one of the most common social problems among individuals with epilepsy is related to marriage. When the cases of marriage annulment or divorce in civil chambers were examined, the results were remarkable. For example, in one lawsuit, wherein the defendant claimed that the plaintiff had concealed their epilepsy and thus demanded the annulment of the marriage, the case was not based on the reason set forth in Article 149/2 of the Turkish Civil Code (TMK); rather it was based on that set forth in article 150/2 of the same. Here, the issue related to the idea of "cheating." The investigation and the evidence gathered in the case revealed that the defendant had secured the marriage by concealing their condition, which became evident when the defendant had a seizure that occurred two weeks after the marriage. Pursuant to article 150/2 of the TMK, for the marriage to be annulled due to infidelity, the defendant's current illness must be of such a nature as to pose a grave danger to the health of the plaintiff or their descendants. However, there was no explanation or determination on this subject in the report on the defendant. As such, the report was not sufficient for the judgment. Establishing a verdict with an incomplete examination, without obtaining an expert report on whether the epilepsy, which was determined to be present in the defendant before marriage, posed a serious danger to the plaintiff and their descendants, necessitated the dismissal of the action.

In six divorce cases, the plaintiffs cited the defendants' epilepsy as the reason for the divorce. When these cases were analyzed, the presence of this disease in one of the spouses was not considered to be a reason for divorce. Here, there was no evidence that the defendant avoided the treatment of their illness, and in the reports received, it was determined that they had the psychological competence to carry out the marriage. Except for the defendant's epilepsy, no other concrete factor was revealed that would threaten the foundation of the marriage union and prevent the continuation of the common life. It was not considered right to make the decision to divorce, and the case was rejected.

We believe that disseminating the details of such cases will reduce the stigmatization of individuals with epilepsy related to marriage. In fact, in a study involving individuals with epilepsy in Türkiye, one-third of the individuals had some concern about getting married, while half of the individuals stated that they had concealed their epileptic condition (30). In one divorce case, it was claimed that the defendant could use violence during epileptic attacks and had epileptic psychosis. In accordance with Article 195 of the TMK, in the case of failure to fulfill the obligations arising from the marriage union or in the case of disagreement on an important issue regarding the marriage union, the spouses may request the intervention of the judge, separately or together. If necessary, the judge will take the measures stipulated in the code upon the request of one of the spouses. According to article 197 of this code, any one of the spouses has the right to live separately as long as their personality, economic security, or family peace are seriously endangered due to common life. This case was evaluated within this context.

Some of the cases heard in the civil chamber were related to epileptic seizures in the workplace, and it was decided to evaluate whether this would be included within the scope of work accidents. Being able to receive social insurance benefits due to a work accident primarily depends on the institution's acceptance that the event indeed constituted a work accident. If this is not the case, the insured or the beneficiary must prove that the incident was a work accident. In the first paragraph of article 13 of law 5,510, a work accident occurs when the insured is at the workplace and is carrying out the required work, if the insured works independently on their own behalf and account and an accident occurs due to the work they are carrying out, or the accident occurs during assignments outside of the individual's main job in the workplace. Within the scope of subparagraph (a) of the first paragraph of article 4 of this law, if an insured woman who is breastfeeding during the times allocated to give milk to her child in accordance with the labor legislation or during the insured's travel to the place of work in a vehicle provided by the employer has an incident that causes mental stress, this is deemed to be a work accident. If the employer employs their workers within the work classes specified by a physician under conditions suitable for epilepsy and takes appropriate precautions to ensure occupational safety, the seizures and the attendant consequences will be considered in terms of normal diseases. Of course, occupational physicians, occupational safety specialists, and neurology specialists are also consulted in these cases.

There were two other notable cases among the civil chamber cases. These related to individuals who were found dead at work. Since this involved a situation that resulted in death, factors such as forensic medicine, autopsy, how the event occurred, and other evidence came into play. However, the rate of sudden unexpected death among epileptic patients (SUDEP) ranges from 1/10,000 (the least at risk group is that with newly diagnosed epilepsy) to 5-10/1,000 (the most at risk group is the group with resistant epilepsy) (31). For this reason, it should be stated in the health reports of individuals with epilepsy whether the individual can continue to do nightshifts, whether they can work in jobs that require attention, and whether they are suitable for working in dangerous/heavy jobs, while the risk of SUDEP should be evaluated and, if necessary, it should be stated that these individuals cannot work in jobs where they will stay alone for a long period of time.

Another remarkable case involved a plaintiff whose employment was restricted due to pathological activity in the EEG examination. Here, the plaintiff filed a claim for compensation by presenting evidence that they did not have epilepsy. It should be noted that typical epileptiform EEG anomalies can also be encountered in normal individuals (1.5%-5% in normal children) (32), while, in contrast, only slow waves can be encountered in the EEG examination of an epileptic patient, and even repeat examinations may return completely normal results. In this respect, the physician evaluating the EEG should avoid directing the clinician toward a diagnosis (32). If there is no clinical evidence suggestive of epilepsy but there is a relevant EEG finding, it is appropriate to provide information about the person in line with the regulations of the relevant institution in the employment reports or health reports. If the history does not support epilepsy, making a decision based on the EEG result may lead to loss of rights.

Conclusion

This study has demonstrated that epilepsy is a highly dynamic disease in terms of law. The awareness of epilepsy among both individuals and legal bodies is increasing. Therefore, the cases that involve this issue are increasing day by day. Knowing the causes and consequences of the current lawsuits will allow us to gain control over the subject and will enable the patients, the physicians, and the legal professionals to carry out the process in the most ideal way.

Ethics

Ethics Committee Approval: Not necessary. Informed Consent: Not necessary. Peer-review: Externally and internally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: P.U.U., Concept: A.T., Design: P.U.U., Data Collection or Processing: P.U.U., Analysis or Interpretation: A.T., Literature Search: P.U.U., Writing: P.U.U.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

- Petekkaya, Erkol ZZ, Hösükler E, Gündoğdu V, Samurcu H. Epilepsy and assessment of criminal responsibility: a case report. Journal of Forensic Medicine 2018;98-100.
- Epilepsy. Date of Access:12 March 2018. Available from: http://www.who. int/mediacentre/ factsheets/fs999/en/ (cited:).
- Sander JW, Shorvon SD. Epidemiology of the epilepsies. J Neurol Neurosurg Psychiatry 1996;61:433-443.
- Gilliam FG, Santos J, Vahle V, et al. Depression in epilepsy: ignoring clinical expression of neuronal network dysfunction? Epilepsia 2004;45(Suppl 2):28-33.
- Yolcu S, Canbek Ö, İncesu C, Uygur N. Epilepsy, offense and criminal responsibility. Düşünen Adam 1999;12:34-40.
- Kaplan C. Marriage and having children problemin epilepsy patients. Epilepsi 2018;24:132.
- Gyimesi J. Epilepsy, violence, and crime. A historical analysis. J Hist Behav Sci 2022;58:42-58.
- Knepper P, Ystehede PJ. The Cesare Lombroso Handbook. 1th ed. New York: Routledge, 2013.
- Monaco F, Mula M. Cesare Lombroso and epilepsy 100 years later: an unabridged report of his original transactions. Epilepsia 2011;52:679-688.
- Bear DM, Fedio P. Quantitative analysis of interictal behavior in temporal lobe epilepsy. Arch Neurol 1977;34:454-467.

- Shukla GD, Srivastava ON, Katiyar BC, Joshi V, Mohan PK. Psychiatric manifestations in temporal lobe epilepsy: a controlled study. Br J Psychiatry 1979;135:411-417.
- Lopez-Rodriguez F, Altshuler L, Kay J, et al. Personality disorders among medically refractory epileptic patients. J Neuropsychiatry Clin Neurosci 1999;11:464-469.
- Perini GI, Tosin C, Carraro C, et al. Interictal mood and personality disorders in temporal lobe epilepsy and juvenile myoclonic epilepsy. J Neurol Neurosurg Psychiatry 1996;61:601-605.
- 14. Mendez MF. Psychopathology in epilepsy: prevalence, phenomenology and management. Int J Psychiatry Med 1988;18:193-210.
- Naylor AS, Rogvi-Hansen Bá, Kessing L, Kruse-Larsen C. Psychiatric morbidity after surgery for epilepsy: short-term follow up of patients undergoing amygdalohippocampectomy. J Neurol Neurosurg Psychiatry 1994;57:1375-1381.
- Victoroff J. DSM-III-R psychiatric diagnoses in candidates for epilepsy surgery: lifetime prevalence. Neuropsychiatry Neuropsychol Behav Neurol 1994;7:87-97.
- 17. Treiman DM. Epilepsy and violence: medical and legal issues. Epilepsia 1986;27(Suppl 2):S77-S104.
- Grant AC, Koziorynska E, Lushbough C, Maus D, Mortati K. Acute postictal confusion and violence: two cases with unfortunate outcomes. Epilepsy Behav Case Rep 2013;1:71-73.
- 19. Centel NB, Zafer H, Çakmut ÖY, Demirel G. Kişilere karşı işlenen suçlar. İstanbul: Beta, 2011.
- Agrawal A, Timothy J, Pandit L, Manju M. Post-traumatic epilepsy: an overview. Clin Neurol Neurosurg 2006;108:433-439.
- Moreno A, Peel M. Posttraumatic seizures in survivors of torture: manifestations, diagnosis, and treatment. J Immigr Health 2004;6:179-186.
- 22. D'Ambrosio R, Perucca E. Epilepsy after head injury. Curr Opin Neurol 2004;17:731-735.
- Kuzudişli Uslu S, Geyik S, Geyik AM, Dokur M. A clinical problem that should not be forgotten in head trauma: post-traumatic epilepsy. Türk Nöroşir Derg 2015;3:296-301.
- 24. Perron AD, Brady WJ, Huff JS. Concussive convulsions: emergency department assessment and management of a frequently misunderstood entity. Acad Emerg Med 2001;8:296-298.
- Pitkänen A, Bolkvadze T. Head trauma and epilepsy. Epilepsia 2010;51(Suppl 5):31.
- Sheth SG, Krauss G, Krumholz A, Li G. Mortality in epilepsy: driving fatalities vs other causes of death in patients with epilepsy. Neurology 2004;63:1002-1007.
- Topçuoğlu ÖG. Epilepsy and driving in Turkey. New Symposium Journal 2011;49:4.
- Hashimoto K, Fukushima Y, Saito F, Wada K. A study on driving status in 98 epileptic patients with driving licences. Jpn J Psychiatry Neurol 1991;45:323-326.
- Naik PA, Fleming ME, Bhatia P, Harden CL. Do drivers with epilepsy have higher rates of motor vehicle accidents than those without epilepsy? Epilepsy Behav 2015;47:111-114.
- Aydemir N, Kaya B, Yıldız G, Oztura I, Baklan B. Determinants of felt stigma in epilepsy. Epilepsy Behav 2016;58:76-80.
- Gürses C. SUDEP-Sudden Unexpected Death in Epilepsy. Turkiye Klinikleri J Neurol-Special Topics 2012;5:52-55.
- 32. Elektroensefalografi, Avaliable from: 15 September 2022. Available from: http://www.itfnoroloji.org/semi2/eeg.htm.