Ethical and legal medicine aspects related to hepatic encephalopathy

Elena Toader¹, Gheorghe G. Bălan¹,*, Diana Bulgaru Iliescu¹, Dan Perju-Dumbrava²

Abstract: The study initiates a thematic debate in which we associate a series of ethical and legal considerations on hepatoportal encephalopathy frequently encountered in both theory and especially in medical practice. We used as a model for ethical and legal dilemmas assessment a real-life case of a relatively young doctor diagnosed with chronic hepatitis virus C infection, non-responder to antiviral therapy who later progressed to liver cirrhosis and minimal HE. Having in mind background information, beyond the usual medical debates, we propose for discussion following legitimate ethical dilemma: To what extent is HE involving ethical and legal medicine issues? What are the ethical, moral, ethical and legal issues involved?

Key Words: cirrhosis, encephalopathy, hepatitis virus C, ethical dilemmas.

Our ethical and legal medicine arguments are based on a clinical case, an ordinary case in which many of us find ourselves as physicians of this young doctor diagnosed with hepatitis virus C infection. After the workup we established that the patients would be eligible for antiviral therapy but later on, unfortunately, he did not show any virusologic answer after three months of treatment. The patient remains constant in his follow-up in The Institute of Gastroenterology and Hepatology (IGH) where he initially has presented himself to a medical examination. Later, in 2007, the condition of the patient deteriorates and, as shown by the clinical and laboratory parameters, there is evidence of illness progression to liver cirrhosis and minimal hepatic encephalopathy (HE) phenomena. The patient raises questions about possible new antiviral therapies still unavailable at that time in Romania. As plenty of recent studies suggest, the presence of hepatic encephalopathy (HE) in patients with cirrhosis leads to constant evolution towards higher HE grades, in this way increasing mortality and morbidity rates [1–4]. Traditionally, no attention was paid to patients with MHE, as they were considered ‘to early to be treated’. Nevertheless, recent studies conclude that MHE patients may show an increased risk of developing ‘overt HE’ compared to cirrhotic patients with no HE [5, 6]. Also their overall quality of live was shown to be poor [7].

Having in mind these evidence based medicine facts, an ethical analysis shows that bioethical and even legal structure of the case is based on three pillars that may generate a so-called central ethical core.

The first pillar refers to the main nucleus of the doctor-patient relationship frequently put in theoretical debate. In day to day medical practice such relationship would be a criterion for modelling ethical physician paternalism that would promote the doctor to choose what is best for the patient with empathy and open deliberation, until the patient’s autonomous legally obtained and informed consent is expressed.

The second pillar is the central core of the health system issues with distinction for two main components: (a) the hospital administrative component which states that the Institute of Gastroenterology and Hepatology is a tertiary national hepatology center which legally must offer secure medical services according to the tertiary care level of competence: high professional level specialists, in-hospital treatment options and specialized equipment and expertise provided by highly complex procedures; (b) the human resources involved which are represented by highly or multiple specialized medical staff (physicians and secondary

1) "Grigore T. Popa" University of Medicine and Pharmacy of Iasi, Faculty of Medicine, Iasi, Romania
* Corresponding author: 9 Sulfinei St., 700456, Iasi, Romania, Tel: +40.727826143, E-mail: balan.gheo@yahoo.com
2) Institute of Legal Medicine, Cluj-Napoca, Romania
personal). This should be at least from the administrative point of view the legal standard of care to which doctors should refer in such cases.

The third pillar refers to the mandatory medical conduct to treat both common and complex conditions and diseases, even in circumstances that may be considered without foreseeable medical benefit or hope. Such circumstances may cover also the clinical conditions triggered by HE which bares important difficulties encountered by the medical team that may lead to life threatening complications and on the long term to stigma and margination consequence of outcomes and practices without a just cause.

We find it important to highlight the differentiated representation how the three players interact – the medical system, the doctor and the patient. Important health aspects related to chance and hope to target and achieve curative treatments derive from the cohesion between possible therapeutic fail versus right to benefit from optimal healthcare of each patient. First issues to be remembered are the two important pieces of this puzzle represented by the right to benefit from best possible healthcare which in the opinion of the health care system should be protected and guaranteed. Such context of rights may be seen as converted to obligations of all parties involved to ensure such optimal healthcare even in situations with no clear long term benefit.

**METHODOLOGY**

The methodological tools that we used in the ethical and legal analysis were basically the two main ethical concepts, that of autonomy and dignity. These worked both as an ethical function, and personal subjective property, in this way creating a common ground in three areas of debate medical, ethical and legal.

Unfortunately, the literature of the field is not able to produce a distinctive but cumulative approach to ethical and legal aspects of HE. Therefore we have developed a working model of evaluation based on two main directions: the medical context of HE versus the analysis of the system of ethical values stratified in four main levels.

First level is represented by the medical context of HE which may be seen as a unvaried analysis that reported the patient doctor relationship is different in an environment built on standards established by protocol norms, regulations, and guidelines. This is the context to which the medical debate on HE treatment and solutions should be related by doctors working in highly qualified centers. In what the patient is concerned, the medical context of HE is structured upon information taken from various sources that may lead to the risk of exposure and contamination with both positive information for selected cases, negative ones referring to various frequent cases of treatment failure. This may be seen as an area that besides hope and positive thinking may also develop towards patient dissatisfaction detained in form of the constant search for legal liability and malpractice. Such situations actually may happen only if they meet the legal requirements represented by the presence of a determining

factor which should be decisive in causing damage following the granting of medical care under the golden standard course proven for each patient.

The second level highlights the combined assessment of each case through a system of ethical and moral norms used as principles of good faith and proper professional conduct. This is a professional duty and obligation of the physician to act legally and ethically in each specific case. These values are representative and significant for the preferences and values for each patient especially in what the quality of life is concerned. In the presented case the problems regarding the quality of life involve some ethically and legally significant consequences if we are to consider: (a) the personal side of the case (the disease, therapeutic failure and lack of new therapies); (b) the professional life of the patient (such condition affects the patient’s career, he may not be able to practice medicine at least at the extent that he was used to before, and nevertheless the patient should consider possible viral transmission to patients), and (c) the consequences related to the family life of the patient (marital life, children, source of income etc). All these are dimensions are parts of the quality of life that should be assured by a legitimate exercise of the right to healthcare. The latter is but related to the limits of the health care system that forces both parties to classify such values as a common denominator.

The third level analysis revolves around the autonomy of the person with particular interest upon its division in individual autonomy and, especially in case of physician, the autonomy acquired through professional education as a doctor. These two faces of autonomy can be seriously influenced by the nature of the disease characterized by the presence of HE. The role and importance of this division is reflected first in the way the doctor-patient relationship is influenced in the key moment of decision and secondly by the type of autonomy exercised. A synchronization of the two forms of autonomy is an expression of professional altruism and honesty. Particularly, permanent physician responsibility must reframe reality associating the values and beliefs of the patient. Nevertheless, he could be actively involved in the decision making process both theoretically and practically. This is, we consider, the proper conduct meant avoid unjustified paternalism generated by patient-physician relationship and domination of power awarded by the professional doctor. This proper conduct may avoid medical liability concerns even when patients of different degrees of vulnerability are involved.

The fourth level of analysis refers to an identity conflict of values that in such cases may transform the doctor-patient relationship in a doctor to doctor one, particularly focusing on maximized responsibility of the professionals in accordance with the model of clinical trials in which patients receive permanent medical supervision with the subsequent need of reporting any adverse reactions to referral professionals. The constant right of the patient to be assisted by medical personnel and the right for a medical second opinion are few of the situations implied that makes us see the extent of the ethical and legal implications of HE in
patients specialized in and active the medical field.

**DISCUSSION**

Firstly, in debate upon the case presented are ethical dilemmas related to the relationship between autonomy and beneficence of patients. It has been recognized that autonomy and beneficence are two of the fundamental principles of biomedical ethics [8]. By autonomy, we mean the independence or freedom of individual actions [9], regarded both in an intelligent and volitional manner. From an ethical point of view, autonomy highlights the individual’s right to his or her own opinion, materialized in decisions and acts based on his own value system [10].

In the case presented, beyond these ethical and legal emphases made to stress the dilemmas that professionals could face, in would be important to remember and always identify when typical medical conditions associated with HE may involve serious ethical and legal consequences. Treating and monitoring a patient diagnosed with HE who is himself a medical practitioner could involve such consequences. The main reason for this is de nature and degree of professional to patient communication especially in what the neurologic and psychological incident consequences are concerned.

It should be thoroughly stressed that data derived from clinical and experimental studies, besides the fact that it confirms the hypothesis that elevated ammonia secondary to liver failure may be source for HE and brain changes, these data confirm that such changes may adversely affect the overall prognosis of patients suffering from hepatic encephalopathy still in minimal HE stages. Such patients may experience first almost non-detectable psychological and neurologic disorders (the case of minimal HE), but these pathologic features may affect cognition, rapid response, ideas or even consciousness of patients. Furthermore, such incipient stages could go further to clinically overt HE stages.

In such cases, the inherent and frequent psychiatric changes may affect important subjective values such as the dignity of patients with potential consequences of ethical significance as the targeted autonomy, the altered ability to express informed consent and the high state of vulnerability of patients. Theoretically and epistemologically, consent has its origin in the bioethical fundamental principle of autonomy. Regardless of the fact that we either objectively refer to the rigours of the autonomy – rationally, or we make reference to a subjective autonomy – individual freedom [11], the medical consent appears as an ad validitatem condition for the existence of a professional relationship. This ethical fund is also consolidated by the positive right rigors which place the consent as one of the general conditions of existence of the medical legal act [12].

All these aspects have a very proactive influence upon the history of each patient making even minimal HE not so clinically and ethically insignificant as it may seem. Furthermore, minimal HE is the stage where therapeutic interventions may already express also legal limitations such as prohibiting patients to drive a car, or to perform usual legal contracts that now may need professional certification of discernment. Signing such documents, alongside with performing various medical professional procedures imply serious ethical dilemmas for both hepatologist and patient, especially when the law is silent.

**CONCLUSION**

The bioethical analysis of this case, besides evoking negative experiences with profound impact on quality of life, raises important ethical dilemmas that many professionals might face when the patient is in turn involved the doctor. The medical literature provides a number of recommendations regarding the management of these situations, but optimal behaviour will certainly be difficult to choose. This situation is remarkable especially since the Romanian law, at least at this moment fails to provide a feasible solution of the legal status of patients diagnosed with minimal HE.

**Conflict of interest.** The authors declare that they have no conflict of interest concerning this article.

**References**


