

Hunger strike among detainees: guidance for good medical practice

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Summary

Hunger strike is a regularly reported problem in prison. Although clinical situations are rarely severe, hospitalisation is often considered. In consequence, it is not only physicians working in prisons, but also hospital medical teams who face challenges related to hunger strike, involving somatic, psychological, legal and human rights aspects. Furthermore, deontological rules must be strictly respected when delivering care, particularly in prison setting. Starvation involves metabolic changes and can cause severe, and sometimes even irreversible or fatal complications. Moreover, the phase of re-alimentation should not be trivialised, as re-feeding syndrome is a potentially fatal phenomenon. This article provides guidance for monitoring and management of patients on hunger strike.

Key words: *hunger strike; prisons; detention; human rights; re-feeding syndrome*

Introduction

Hunger strike is a regularly reported problem in prison [1]. The World Medical Association (WMA) defines hunger strike as voluntary total fasting (taking only water, possibly with salt, minerals or sugar added) lasting more than 72 hours by a mentally competent individual as a form of protest or demand. Two main categories of individuals embark on hunger strikes with different intentions and motivation. Some food refusers fast to gain publicity to achieve their goal, but have no intention of permanently damaging their health [2]. The other category consists of what might be seen as determined hunger strikers who are not prepared to back down unless they have achieved their goal [3]. Important deontological principles of health care in prison are: equivalence of care (in order to ensure that medical care is similar to that provided in the community), respect of patient's consent and autonomy, respect of confidentiality, as well as independence of healthcare professionals towards prison authorities and the juridical system. Most health professionals working in prison are still employed by a penitentiary or a judicial authority which increases the risk of dual loyalty, meaning a conflict of loyalty to his

patient versus loyalty to his/her employer [4]. Health care workers in prison should act exclusively as caregivers, and must act independently from any other interests than those of their patient [3–5]. Independence of the physician from the prison and justice authorities also permits a physician to gain the confidence of the hunger striker, which is essential to maintain the physician-patient relationship throughout this difficult period. Indeed, confidence may be absent or lost if the physician is perceived as a penitentiary agent [6]. When stewardship of health care in custody is at the Ministry of Justice, physicians are in a weak position because of conflict of double loyalty which compromises their ability to exercise independent judgment: therefore, stewardship of prison health care should be given to the Ministry of Health [4, 7].

Guidance for medical management

Hunger strike can cause severe health complications, sometimes irreversible or fatal, and needs a specific approach. However, the occurrence of complications is not immediate and the delay before entering a period at risk depends primarily on the type of fasting, and especially if the striker is in good health at the start. Tables 1 and 2 provide key elements for medical management of detained hunger strikers. The physician communicates information concerning potential complications of hunger strike to the patient. In addition to general principles and a holistic approach, the case of each hunger striker must be carefully and individually analysed with the aim to gain the striker's confidence. During the first contact, the physician addresses the reasons for the strike and makes sure that the hunger striker took his decision independently of third parties or external pressure. Furthermore, the physician verifies that the hunger striker has informed the target partner who is generally a member of the judicial or correctional authorities. Physicians can find it useful to communicate with relatives, but families may support the detainees' fasting or try to put pressure on the authorities to intervene to save the prisoner's life regardless of the hunger strikers views [3]. Within 24 hours after confirmation of a detainee in hunger strike, a thorough medical evaluation must be made, especially to define

modalities of fasting and to determine whether the patient has co-morbidities (physical and/or mental). As early as possible, physicians should also acquire a detailed medical history and make a thorough examination [3, 5]. Some situations may be life-threatening in less than a week. Absolute fasting (not only no food but moreover no fluid intake) is not compatible with life for more than a few days. Significant co-morbidities or drugs with a narrow therapeutic window can lead to severe complications. Any mental disorder must be ruled out. The healthcare professional must explain the reason for medical follow-up and inform the striker of the health risks he/she exposes him-/herself to. The physician must proceed with medical and laboratory assessments to get baseline data and thereafter approximately once a week, depending on clinical and biological abnormality (tables 1 and 2).

In terms of follow-up, the medical team must have daily contact with the hunger striker in order to assess his/her health and the wish to continue the fast. Some of these visits can be performed by nurses as a delegated medical task. An exhaustive medical consultation, including history, physical examination and laboratory assessment must be planned once a week, ideally by a single referent in whom the striker trusts.

Ethics and decision making capacity

As any citizen, detainees have the right to refuse food and fluid, as well as any medical treatment. Crucial differences between “artificial”- (feeding by vein or naso-gastric tube) and “forced”-feeding needs to be understood. Force-feeding is always artificial but not all artificial feeding is forced. If a striker has his decision making capacity, artificial feeding against his will involves coercion and can be considered as an assault (forced-feeding). Nevertheless, most hunger strikers have no intention of permanently damaging their health and often agree to artificial

feeding being provided at some stage. For these reasons, it is important for physicians to accurately explain to hunger strikers the potential health impact of prolonged fasting and understand as soon as possible the person’s values and wishes regarding medical treatment.

The detainee should sign advance directives while he/she still has his decision making capacity although the drafting of these directives may increase the risk of locking the hunger striker in a radical position. However, advance directives can be discussed and changed at any time [3]. The physician should not override voluntary, informed and competent decisions of the patient. In the particular case of the hunger strike, healthcare professionals should respect the autonomy and decision of a detainee to refuse nourishment, provided that the detainee is competent to make the decision. This remains true even if his/her life is endangered, and independently of the motives for this behaviour.

By refusing to force-feed a detainee, healthcare providers can be exposed to judiciary pressure or sanctions and to negative opinions from media, public or peers [8]. In 2006, the World Medical Association updated the Declaration of Malta with guidelines on care of hunger strikers in prison. Forced feeding was confirmed as ethically unacceptable and is considered as an inhuman and degrading treatment and qualified as torture by the European Court of Human rights [3, 9].

When the mental capacity of the hunger striker is lacking or doubted, a psychiatrist should evaluate the patient [6], and an independent expert, outside the medical team in charge of the patient, should be involved to assess decision making capacity.

Regular re-assessment of the patient’s wishes in relation to these decisions and the decision-making capacity is required. If the patient lacks the decision-making capacity and he/she neither write advance directives nor appointed a

Exclude (if present, the patient should not be considered as a hunger striker)	<i>Religious or philosophical fast</i> (no claim)		
	<i>Somatic disease</i>	Digestive disease (e.g., dyspepsia)	
		Extra-intestinal disease (e.g., cancer)	
	<i>Psychiatric illness</i>	Anorexia (does not recognise the risk of malnutrition / sometimes claiming)	
		Depression (depression could induce loss of appetite; differential diagnosis sometimes difficult)	
Psychotic disorder (delusional fear of poisoning)			
Personality disorder			
Assess	<i>Modalities of fasting</i>	Absolute (no food and liquid intake)	
		Total (only water and abstinence from all foodstuffs)	
		Partial (only some nutrients are not taken)	
	<i>Decision-making capacity</i> (by an internist or possibly by a psychiatrist if lacking or doubtful)		
	Verify that the <i>target</i> (often the authorities) was <i>notified</i> of the process and/or <i>promote dialogue</i>		
	<i>External pressures</i> (family, groups of “support” or political)		
	<i>Risk factors</i> (diabetes, pregnancy, depression or other chronic disease)		
	Measure and record <i>weight</i> , baseline <i>laboratory testing</i> and <i>electrocardiogram</i>		
	Discuss and inform	<i>Cause and goal</i> of the hunger strike	
		<i>Mental and physical consequences</i> of a hunger strike (cf table 3)	
<i>Need of fluid intake</i> (1.5–2 l/day)			
<i>Preventive measures</i> (vitamins, electrolytes, anticoagulation in case of bed rest)			
Determine, if life-threatening emergency	<i>Significant co-morbidity</i> or		
	<i>Absolute fasting</i> or		
	<i>Drug with narrow therapeutic window</i>		
Plan for the medical follow-up (refer to table 2)			

Table 2: Elements to be considered in the <i>medical follow-up</i> with a patient on hunger strike.		
Follow-up frequency	Contact with the medical team daily / exhaustive consultation about once a week	
Assess/discuss	Exhaustive <i>anamnesis</i> and <i>physical examination</i>	
	Search for <i>psychiatric disorders</i> (depression, delusions, paranoid disorders, sleep disorders)	
	Medical follow-up by a <i>psychiatrist</i> (in case of psychiatric disorder or prolonged hunger strike)	
	Reevaluation of <i>decision-making capacity</i> (by an external expert in case of prolonged hunger strike)	
	Repeat information on the mental and physical <i>consequences</i> (refer to text and table 3)	
	With the agreement of the patient, <i>inform the target</i> regularly (medical certificates)	
	Suggest drafting of <i>advance directives</i> when appears a risk of complications	
Laboratory testing and other additional tests (~once a week from the third week)	Complete blood count, glucose, ketonuria	Creatinin kinase (if myalgia)
	Na, K, urea, creatinine, bicarbonate	Albumin
	P, Mg ²⁺ , Ca ²⁺ , uric acid	Thiaminaemia (if refusal of supplementation)
	Transaminases (if liver disorder)	Electrocardiogram
	<i>Fluid intake</i> ~ 1.5–2 l/day	<i>NaCl infusion</i> if no longer able to drink
	<i>Minerals</i> : 1.5 g/day	<i>Vitamin B₁</i> / multivitamin supplement
Treatment to propose	<i>Supplementation</i> in cases of electrolyte disturbances (K ⁺ , Ca ²⁺ , Mg ²⁺)	<i>Thrombosis prevention</i> if prolonged bed rest
	Weight loss >10% (more if extra reserves)	Severe hypothermia (T <35.5 °C)
	BMI <16.5–18 kg/m ² (15 kg/m ²)	Neurological signs
	Co-morbidities (e.g., diabetes mellitus)	Significant renal or electrolytic disorders (related to fasting)
	Absolute fasting	To facilitate the resolution of the conflict (a change of context can be beneficial)
Indications for hospitalisation: no consensus, to re-evaluate regularly in case of	Severe bradycardia (<35/min or irregular pulse)	To initiate re-feeding (if fasting >2 weeks)

Table 3: Information on the complications of the hunger strike.	
Information on the complications of the hunger strike	
<i>(Archive a copy in the medical record and give a copy to the patient. If the patient refuses to sign the document, give information to the patient and notification in the medical record by two different people)</i>	
<p>Prolonged starvation can result in serious harm to a person's body and mind. When there is a deficit in energy intake, the body consumes its own stocks to maintain blood glucose, its main fuel. The body will first use fat stocks. Then, the body will begin to use muscle and organ tissue to produce energy. Salt and vitamin deficiencies are also harmful for the body.</p> <p>During a hunger strike, in addition to weight loss, many other symptoms are common:</p> <ul style="list-style-type: none"> • Sensation of hunger at the beginning then loss of appetite; • Apathy and irritability; • Headache, dizziness, difficulty getting up and moving, stroke; • Anxiety, sadness, insomnia, impaired concentration; • Abdominal pain, peptic ulcers, nausea, constipation (sometimes diarrhoea); • Very painful nephrolithiasis, renal failure; • Reduction of blood pressure and respiratory rates. <p>The longer the fasting lasts, the greater the risk of serious complications increases. They are sometimes irreversible:</p> <ul style="list-style-type: none"> • Neurological disorders: limb paralysis, blindness, coma; • Death on neurological, cardiac, pulmonary or renal problems, etc. <p>In case of absolute fasting implicating no food and water intake, the risks are even greater and vital danger occurs within few days. You should also know that at the time of stopping the hunger strike, complications may also develop especially if weight loss was significant:</p> <ul style="list-style-type: none"> • Bloating, diarrhoea; • Drowsiness, neurological disorders; • Cardiac or lung disorders; • Death. <p>I hereby _____ certify that I have been informed by Dr. _____ about risks that I face in making</p> <p>? Hunger strike ? Thirst strike</p> <p>I certify that I understand the consequences.</p> <p>date _____, and place _____</p> <p>Signature of the patient: _____ Signature of the doctor: _____</p>	

legal representative, the healthcare professional has to act according to the objective interests of the patient [3].

Physician-patient relationship

The conventional dual physician-patient relationship shifts to a triadic physician-patient-authority relationship in case of a hunger strike. Additional partners often claim a role and may try to pressure the physician, such as family, public, media or politics. The physician should be impartial, empathetic and should not become involved in the conflict between the hunger striker and partners. It is critical that the physician obtains the confidence of the hunger striker but also the respect of the authority which the patient conflicts with. All consultations must take place in absolute privacy, and all communication (with authorities, mass media and family) should always be made after prior approval of the patient. The physician is also expected to play an active role as neutral mediator in the conflict between the person who fasts and the partner he pressures; the doctor, with the patient's agreement, regularly informs this target partner [1].

If, for conscience reasons, a physician is unable to abide by a hunger striker's refusal of treatment or artificial feeding, the physician should make this clear at the outset and refer the hunger striker to another physician who is willing to abide by the hunger striker's refusal [5].

The role of the psychiatrist

Hunger strikers are generally managed by general health care physicians and the nurse staff. Nevertheless, psychiatrists should be involved as early as possible in case of hunger strike. It is also important to assess the patient prior to possible physical and mental deterioration caused by prolonged fasting [10]. Determining whether the detainee who is on hunger strike suffers from a mental disorder is therefore the primary task of the psychiatrist. It is indeed crucial to make the distinction between a competent prisoner's decision, which should be respected, and an incompetent prisoner's attitude which may, for example, result from delusions of poisoning in the course of a schizophrenic disorder. In case of incompetence due to a mental illness, compulsory intervention may be necessary. Adequate treatment of the psychopathology should result in cessation of the hunger strike. Assessment of competence in a case of hunger strike should include purpose and motivation, but other important behavioural determinants are also to be considered. Situational factors (whether the hunger strike is a personal decision or results from peer pressure, the individual's legal status) and individual factors (minor/adult, other cultural and socio-demographic factors and possible pre-existing mental illness) should also be recorded [10]. Due to their professional principles and practice with suicidal patients, psychiatrists may be reluctant to let someone who is otherwise healthy choose to die [10].

Modalities of hunger strikes and effects of malnutrition

We define three modalities of hunger strike. *Absolute fasting* means no food and fluid intake. This option is rare: as the body cannot survive more than a few days without flu-

id, the period for negotiation is too short to be effective. *Total fasting* involves taking only water and abstention from all foodstuffs; salt (either sodium chloride alone or a combination of minerals) is often added to the water. In case of *partial fasting*, the striker takes some form of liquid nourishment (e.g., sugar, honey) and only abstains from solid food [3]. Some forms of partial fasting are considered as "cheating" by the authorities, however if prolonged, lead to death but at a much later stage than a total fast.

Early identification of any medical condition that may put the striker at increased risk of complications is also essential. A refusal to feed for religious motives, inability to eat by virtue of a somatic disease or fasting as a manifestation of a mental illness must be rapidly ruled out [1]. During a starvation state, malnutrition can affect every system and leads to a broad spectrum of conditions: vitamins deficiencies (Wernicke-Korsakoff syndrome), electrolytes imbalance (heart arrest), ketone metabolism (dramatic loss of weight and acidosis), decreased protein synthesis (immunosuppression) for example.

The net result of metabolic and hormonal changes in early starvation is that the body switches from using carbohydrate to using fat and protein as the main source of energy. The body consumes its glycogen reserves within 2 or 3 days, and then some amino acids take over as substrates for gluconeogenesis during a few days. During prolonged fasting, hormonal and metabolic changes aim to prevent protein and muscle breakdown (protein catabolism producing only about 10% of energy). Muscle and other tissues decrease their use of ketone bodies and use fatty acids as the main energy source [11]. Thus, the human brain derives energy from fat stocks, permitting survival by starving in normal-weight persons for up to 2 to 2.5 months [12]. When fat stocks are used up, a catastrophic protein catabolism will develop. Although, other complications arise before [13]. Main somatic complications ensuing from these physiopathological mechanisms are dehydration (shock, renal failure, stroke), hypoglycaemic coma, metabolic disturbances (arrhythmias), vitamin deficiencies (Gayet-Wernicke), peptic ulcers and nephrolithiasis, without forgetting the major risks associated with re-nutrition (see below). Serious complications and death occur especially from the fortieth day on, but early and unexpected complications are possible. Close medical monitoring is recommended after a 10% of weight loss in lean healthy individuals. Serious medical problems begin at a loss of approximately 18% from initial body weight [3, 13]. The risk of neurological signs by thiamine (vitamin B₁) deficiency is common in cases of fasting with exclusive intake of sugar and liquids [6]. The physician should regularly repeat all these dangers to the patient.

Fluid intake and hospitalisation

A minimal daily fluid intake of 1.5–2 litre is necessary. This information should be regularly reminded to the patient, as the sensation of thirst decreases during fasting [13]. A prescription of salts and vitamins (thiamine especially) is recommended, as well as the treatment of any electrolyte disorders.

No consensus exists concerning criteria for hospitalisation [1]. Several indications ensue from risks of complications, but hospitalisation can also be offered for example when it seems favourable for the resolution of the conflict. The setting is known as unfavourable when several hunger strikers are kept in one place, with risks of radicalisation of the hunger strike. Thus in the same hospital unit, no more than one patient who fasts should be admitted; a second should be the exception.

Re-nutrition

The re-nutrition phase must be very careful as re-feeding syndrome is a potentially fatal phenomenon. This syndrome usually occurs within four days after starting re-feeding. Nutrient re-introduction must sometimes be done in a hospital setting with a nutritionist's help [1, 11]. During a prolonged period of starvation, several intracellular minerals become severely depleted, in particular phosphate. However, serum concentrations of minerals may remain normal. During re-feeding, glycaemia leads to increased insulin and decreased glucagon. Insulin stimulates glycogen, fat, and protein synthesis. This stimulates cellular uptake of minerals, which can lead to profound hypophosphatemia, hypokalaemia and hypomagnesaemia [11]. As the introduction of carbohydrate to a diet leads to a rapid decrease in renal excretion of sodium, patients may rapidly develop fluid overload. Thiamine – an essential co-enzyme in carbohydrate metabolism – is also of great importance in complications of re-feeding. Thiamine deficiency results in a disruption of the conversion of pyruvate to acetyl coenzyme-A and leads to increased lactate-levels. If lactic acid is in excess, lactic acidosis and death can result. For that reason, thiamine needs to be administered before starting re-feeding. Frequency of complications due to re-feeding syndromes are lacking in hunger strikers, nevertheless clinical features include: rhabdomyolysis, leukocyte dysfunction, respiratory failure, cardiac failure, hypotension, arrhythmias, seizures, coma, and sudden death. Beginning the re-feeding at a reduced calorific rate reduces the risk of re-feeding syndrome. Serum phosphate, magnesium, calcium, potassium, urea, and creatinine concentrations should be measured before feeding and repeated daily for four days after feeding is started. If hypophosphatemia occurs it should be corrected in addition to other electrolyte abnormalities, such as hypokalaemia and hypomagnesaemia. The conjunction of electrolyte imbalance increases the risk of arrhythmias and sudden death [11, 14].

Conclusions

The medical management of detained hunger strikers need experienced and highly qualified medical staff, and refers

to well established national and international principles. The triadic physician-patient-authorities relationship may suffer during a hunger strike and needs a clear and transparent distribution of the role of each partner with strict respect of deontological rules. A cornerstone for good medical management of hunger strikers relates to professional independence of the health care team in order to avoid conflicts of interest.

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