

# Patients “Trafficked” to the Emergency Department: Renal Failure and Other Effects on the Community Health

*Acil serviste noktalanın insan kaçakçılığı:  
Böbrek yetmezliği ve toplum sağlığı üzerindeki diğer etkiler*

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## SUMMARY

**Introduction:** Illegal trafficking of human beings is a social and economic phenomenon which is to be combated seriously. Acute renal failure in trafficked human beings is not common and usually results from prerenal failure.

**Case Series:** This paper describes a group of illegal immigrants brought into the emergency department (ED) after being arrested by the police as victims of human trafficking. The group consisted of 20 young males around their twenties. They were all dehydrated and malnourished after a long journey allegedly suffered in a truck trailer. Thirteen out of 160 were reportedly dead in the whole group. Vital signs were within normal limits in all. Nine cases were found to be confused on admission, including seven with high renal function test values (BUN and creatinine). Three cases had creatinine levels higher than 4 mEq/L. These cases with acute prerenal failure were aggressively and successfully treated with volume replacement. One patient was admitted to the internal medicine ward, while others were treated in the ED for prerenal failure. Some others were vaccinated against tetanus due to cuts in extremities. After stabilization and proper treatment, the patients recovered within several days and were discharged without any sequelae.

**Conclusion:** Clinicians should not overlook the possibility of acute prerenal failure resulting from volume depletion and malnutrition in patients subjected to illegal journeys lasting for weeks in the context of trafficking of humans. Aggressive rehydration and other supportive measures are mainstay points in the emergency management.

**Key words:** Acute prerenal failure; emergency department; human trafficking; malnutrition; volume depletion.

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## Introduction

Illegal trafficking of human beings is a social and economic phenomenon which is to be combated seriously. Gushulak and MacPherson reported in 2000 that approximately 4 million persons annually are estimated to be smuggled illegally across international borders each year.

[1] A growing number of people are subjected to human trafficking (HT) in the last decade. Around 700,000 women or children were smuggled in one single year-1997.[1] The numbers are affected by war situations, mass unemployment and poverty. The phenomenon involves young people and male sex predominantly. Direct health hazards of HT are not investigated in depth so far. Acute renal failure in victims of human trafficking is not common and usually results from prerenal failure due to hypovolemia

and dehydration. This paper focuses on the HT and the individual and social impact on health.

## Case Series

A group of illegal immigrants were brought to the emergency department (ED) following being arrested by the police as victims of HT in the end of July 2008. The hospital is a medium-sized state hospital with 300 beds and a daily volume of 650 patients in the ED. The group consisted of 20 young males around their twenties. The departure point was Pakistan and the vehicle coursed through Iran and the eastern border of Turkey. The planned destination was found out to be Italy. The group had been on the road for at least five days. Thirteen out of the group of 160 were reportedly died and the bodies were found to

**Table 1.** Summary of the laboratory data of the patients. The patient #9 was the only one hospitalized.

Pt #	Sex	Consciousness	Na/K (mEq/L)	Admission BUN/Cr (mEq/L)	1st day BUN/Cr (mEq/L)	discharge BUN/Cr (mEq/L)	Fluids infused and other treatments	Additional notes
1	M	Confused	147/4.1	98/5.1	51/1.2	33/1	5 L %0.9 NaCl 500 cc D5W, 500 cc D10W,	
2	M	Confused	137/3.7	42/1.1		42/1.1	4 L %0.9 NaCl, 500 cc D5W	
3	M	Confused	135/4	62/1.1		62/1.1	3 L %0.9 NaCl, 500 cc D5W	Prehospital 500 cc LR
4	M	Confused	128/3.6	42/0.9	29/1.0	26/1.0	2 L %0.9 NaCl, 500 cc D5W	Prehospital 500 cc LR
5	M	Confused	139/3.8	30/1.0			3 L %0.9 NaCl, 500 cc D5W	
6	M	Confused	133/3.5	76/1.8			3 L %0.9 NaCl, 500 cc D5W	
7	M	Confused	140/4.5	113/4.5	70/1.1	55/0.9	4 L %0.9 NaCl, 500 cc D5W, 500 cc D10W	
8	M	Alert	139/3.8	16/0.9			3 L %0.9 NaCl, 500 cc D5W	
9	M	Confused	130/5.0	119/5.0	57/1.3	24/0.9	3 L %0.9 NaCl, 500 cc D5W, 1 L LR, 500 cc D10W	Follow-up due to abdominal pain
10	M	Confused	138/2.5	55/1.8	55/1.8		3 L %0.9 NaCl, 500 cc D5W, 500cc %5D x LR	
11	M	Alert	137/4	11/0.8				PO intake was satisfactory
12	M	Alert	136/3.4	14/0.8				PO intake was satisfactory
13	M	Alert						Finger bandage
14	M	Alert					Bandage + tetanus shot + cephalosporine	Hand laceration/ wrist pain
15	M	Alert					Bandage + tetanus shot	Hand laceration
16	M	Alert					Bandage + tetanus shot	Hand laceration
17	M	Alert					Bandage + tetanus shot	Hand laceration / knee contusion
18	M	Alert					Bandage + tetanus shot	Foot laceration
19	M	Alert					Bandage + tetanus shot	Hand laceration
20	M	Alert					Bandage + tetanus shot	Foot laceration

be left out in a rural area in Istanbul. The remaining were all dehydrated and malnourished after the long journey allegedly cruised in a truck trailer. Vital signs were within normal limits in all patients. Nine cases were found to be confused on admission, including seven with high renal function test values (BUN and creatinine). None was comatose. Three cases had creatinine levels higher than 4 mEq/L (Table 1).

Six patients were vaccinated against tetanus due to cuts in extremities alleged to have occurred while struggling for fresh air outside the truck. The lacerations were mostly simple ones and were sutured in hospitals.

Five cases with acute prerenal failure were aggressively and successfully treated with hydration. Volume replacement started via IV route and continued per orally after the patients were totally able to ingest liquid and solid foods. Most of the treatment was undertaken in the ED due to shortage of hospital beds. In average this subgroup of patients received crystalloid fluids 4 L per day resulting in rapid restoration of fluid and electrolyte balance. These patients recovered from confusion following the treatment. One patient was admitted into the internal medicine ward, while other four patients were treated in the ED for prerenal failure. The patient was followed up in the internal medicine ward for four days before renal functions were restored.

After stabilization and proper treatment, the patients recovered within several days and were discharged without any sequelae.

## Discussion

HT is not a subject extensively investigated in medical literature. This report sheds a new light to direct health consequences of HT which is a contemporary disease of the globe, mostly inflicting poor countries. Turkey is on the common routes taken by illegal networks committing the crime and is viewed as a major stop before reaching European destinations.

HT results in many sociological hazards, e.g. deprivation of education and other social rights, special problems of women and of those in extreme ages, imprisonment and other legal conditions, and problems related to consequences of returning to the country of origin. Besides these, it causes many health problems such that spread-

ing endemic infections, poor hygiene, malnourishment, psychological trauma and other metabolic impairments related to suffering from the long journey. Health risks are assumed by the victims of HT can be analyzed in three periods: the pre-journey, migratory, and arrival phases. ED and other primary care facilities constitute the major entry gate to the health system for these victims in the migratory and arrival phases, thus emergency physicians and general practitioners should be trained on the possible complications and management strategies of HT. Lumpkin et al. investigated motor vehicle crashes caused by smuggling illegal immigrants in the desert of the Southwest United States.<sup>[2]</sup> Between 1999 and 2003, there have been 38 crashes involving 663 passengers (an average of 17 per vehicle) with an injury rate of 49 per cent and a mortality rate of 9 per cent. The authors pointed out that these accidents can go far beyond a region's trauma resources and the national authorities should be prepared for while allocating healthcare funds. The demographic characteristics of the migrants are similar to findings reported by Kim in a Korean case study on the migrants in the country.<sup>[3]</sup> The majority of the migrants are males in their twenties. The author emphasizes that the traditional structural paradigm does not explain some features of labor migration in Asia, including the encouragement of illegal migration. Also, the way of shaping these networks are reportedly different from those in developed countries.

A significant percentage of this group of migrants has been found to harbor renal failure resulting from prerenal causes. Prerenal causes of renal failure in this particular subgroup of patients include insensible fluid losses together with restricted fluid intake before presenting to hospital. There was no evidence of toxic or ischemic insults triggering renal failure. This postulate is supported by the fact that the victims responded well to rehydration without need for any additional treatment.

## Conclusion

In conclusion, clinicians should not overlook the possibility of acute prerenal failure resulting from volume depletion and malnutrition in moribund patients following illegal journeys lasting for weeks in the context of trafficking of migrants. Aggressive rehydration and other supportive measures are mainstay points in the emergency management.

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