

# Producing medico-legal evidence: Documentation of torture versus the Saudi Arabian State of Denial

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## Abstract

Five British men were detained and allegedly tortured in Saudi Arabia in 2000 and 2001. Two were sentenced to death and three were sentenced to 12 to 18 years of imprisonment. They received clemency in 2003 and were deported to England.

After their homecoming, the men have unsuccessfully attempted to sue Saudi Arabian officials who had been responsible for their false accusations and human rights abuses. Saudi Arabia denies any form of torture and ill treatment of the five men, who maintain their allegations against the authorities responsible in Saudi Arabia. This article provides medical documentation of torture of the five British men by comparing: 1. Alleged torture methods, 2. Histories of immediate effects of torture, 3. Objective medical observations using clinical examinations as well as ultrasound scans of the victims' feet. The article concludes that there is a high degree of consistency between the claims of torture and observations, despite Saudi Arabian denial.

*Key words:* torture, medico-legal documentation, falanga, ultrasound

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## Introduction

In the UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment from 1984, torture is defined as the *intentional* infliction of *severe* mental or physical pain or suffering by or with *the consent of the state authorities* for a specific purpose<sup>1</sup>. In the convention, article 10, point 1 states: "Each State Party shall ensure that education and information regarding the prohibition against torture are fully included in the training of law enforcement personnel, civil or military, medical personnel, public officials and other persons who may be involved in the custody, interrogation or treatment of any individual subjected to any form of arrest, detention or imprisonment".

This paper describes the case of five British men who were imprisoned in Saudi Arabia. They were arrested by the Saudi Arabian police in connection with a series of bomb explosions in 2000 and 2001 in Riyadh where they lived and worked. The men were accused of planting bombs as part of a feud between rival gangs dealing in illicit alcohol. After a long period of interrogation, including daily torture, all five men

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confessed to the accusations. Two men were sentenced to death and three to periods of imprisonment ranging from 12 to 18 years.

After more than two years' imprisonment the men received clemency on August 8, 2003 from the state of Saudi Arabia and were deported to England. The men, who claimed their innocence, then began an attempt to sue Saudi Arabian officials who had been responsible for their false imprisonment and human rights abuses – for details of the legal case, see Ferstman 2006.<sup>2</sup> Such attempts at legal redress on a national level are complicated by political and state interests and are most often denied. This was also the case for the five men. In order to produce valid documentation of torture inflicted on the men while imprisoned, their five solicitors contacted the Parker Institute, Frederiksberg Hospital in Copenhagen. The Parker Institute is experienced in documentation of torture. In November and December 2003 and in February 2004 medical doctors examined the five men.

The documentation is based on systematic comparison of the alleged methods of torture, psychological and physical complaints reported by the victims at the time of torture and at the time of examination, and the medical doctors' objective observations. The medical examinations were performed between three and six months after the men's release and between two and three years after torture commenced upon their arrest and interrogation. The examinations were performed by medical doctors with specific experience and expertise in documenting torture and in the institutional setting of a public hospital and research institute independent of any political or institutional interests of Saudi Arabia or the United Kingdom where the five men were attempting legal redress.

The following account of the torture

and ill treatment is extracted from the medical reports made by medical doctors at the Parker Institute and Clinic of Rehabilitation, Frederiksberg Hospital, Denmark. The examinations were conducted in accordance with the principles for examination of evidence of torture as declared in the Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment – The Istanbul Protocol.<sup>3</sup> All five men described in this paper have given their written consent and permission to publish their torture history and medical reports.

### **Background information**

All five men were psychologically and physically well functioning and had been living in Saudi Arabia for five to 25 years. At the time of their arrest they were working for Saudi state or private companies: as a chef in the Royal Military Hospital in Riyadh, as chief anaesthetic technician at the Security Force Hospital in Riyadh, as a marketing consultant in the pharmaceutical industry, as a project manager for a British aerospace housing compound in Riyadh, and as an employee in the construction industry. Four men were married (one of whom was divorced) and all four men had children.

### **Past medical history**

The five men were in relatively good health prior to their arrest. Three had been diagnosed with mild hypertension, of these three, two were taking antihypertensive medication and one had been diagnosed with type II diabetes mellitus. Additionally, three men had known minor musculoskeletal problems: one had been diagnosed with bilateral knee osteoarthritis, one had had arthroscopic meniscus surgery in the right knee, one had a past history with a fibular and a humeral shaft fracture on the left side leaving no im-

pairment, and one had a fracture of the fifth finger on the left hand with reduced range of movement in the distal interphalangeal joint. These chronic injuries do not relate to torture.

### **Allegations of torture and ill treatment**

The five men were arrested individually by officers dressed in plain clothes. On their arrest the men were at home, walking along the street or at work. The first arrests were on 17 December 2000 and the last one in June 2001. All men were accused of taking part in a series of bombings in Riyadh and illicit trading of alcohol; two were additionally accused of being British spies. The men were handcuffed, blindfolded, and taken to an interrogation centre where they were detained without trial or sentence for up to 10 weeks. During daily interrogation sessions lasting several hours they were all subjected to torture and ill treatment with the aim of extracting information about other named British citizens who were said to have been involved in the bombings, and to extract confessions of having taken part in the bombings, including signed written statements.

All men confessed to the accusations and after various periods of time all were transferred to the al-Hair prison in Riyadh. There the torture and ill treatment continued on a regular basis during further interrogation sessions; the aim still being to extract information and signed confessions. After four to five months the interrogation sessions became less frequent and the physical abuse ceased. In July 2001 three men were forced to appear in a publicly televised confession.

In the al-Hair prison the five men were kept in solitary confinement for between nine and 31 months. Two shared a cell after solitary confinement for nine and 12 months, respectively; two others shared a

cell after solitary confinement for 15 and 24 months, respectively. The last prisoner remained in solitary confinement for 31 months.

The men appeared in court up to three times during their imprisonment, without legal representation. Two were sentenced to crucifixion and partial beheading for state terrorism; three were sentenced to 12 to 18 years of imprisonment, but were not informed of the sentence and until shortly before their release, and feared they would be sentenced to death and executed.

The five men were kept imprisoned until August 2003 when they were pardoned and deported from Saudi Arabia.

### **Alleged physical torture methods**

The five men give similar accounts of the torture methods they were exposed to during detention and imprisonment. All men were subjected to systematic and unsystematic beatings, including falanga, and to various forms of positional torture (Table 1 on the next page).

During most torture sessions the men were blindfolded and handcuffed. They all allege to have been subjected to *unsystematic* beatings of the body and extremities with stiff, rounded instruments such as an axe handle or a cane. The beatings left extensive bruising, haematomas and purple/black discolouration, but no open wounds or fractures.

All men were beaten about the head causing bleeding from the mouth, swelling and bruising, leaving four men with dental lesions. The beatings left no open wounds or fractures and no men recall loss of consciousness.

Two men had *telephono*, simultaneous beatings on the ears causing bleeding from the ears, tinnitus and hearing impairment in the acute phase and subsequent persist-

**Table 1.** Distribution of alleged physical abuse.

No. of men	Subject no.	Torture method
5	1,2,3,4,5	<i>Unsystematic beatings with blunt instruments</i>
5	1,2,3,4,5	<i>Systematic beatings:</i>
5	1,2,3,4,5	Beatings on head/face
2	1,3	Beatings on ears (telephono)
3	1,3,5	Beatings on lower back and kidney regions
3	1,3,5	Beatings on palms
5	1,2,3,4,5	Beatings on soles of the feet (falanga)
5	1,2,3,4,5	<i>Forced positions:</i>
5	1,2,3,4,5	Chained standing
3	1,3,4	Prolonged standing, arms elevated
1	2	Prolonged head and hand stand
3	1,2,3	<i>Strapping and suspension:</i>
3	1,2,3	Chicken pole suspension
1	3	Suspension upside down
1	1	Suspension by one arm
1	3	Strapping of wrists and ankles in supine position
1	2	<i>Asphyxiation</i>
1	3	<i>Sexual assault (including rape)</i>

ent tinnitus. On one occasion one man was forced to place his head on a desk with the left side of his face facing up; in this position he was beaten on the left ear.

On two occasions the same man was exposed to low back trauma. On the first occasion a prison guard stamped on his lower back and pelvic region while he was lying on the floor on his stomach, leaving him with severe pain and stiffness in the lumbar-sacral region. On the second occasion he was attacked in his cell by several prison guards and thrown against the edge of the bed plinth. This resulted in a direct trauma to the lower back causing severe, immobilising low back pain but no radiating pain or other neurological symptoms. Two other men were also beaten systematically on the lower back and kidney regions. They observed blood in

the urine, stiffness in the lumbar-sacral region and severe, immobilising low back pain.

Three men were exposed to *systematic beating of the palms* with a thick cane causing severe pain, discolouration and swelling of the palms and fingers and impaired function of the hands in the acute phase. The beatings left no open wounds or fractures.

All men were subjected to falanga performed with rounded, stiff instruments such as an axe handle or wooden canes. One man describes being subjected to *falanga* while lying on his stomach on the floor with his ankles and wrists strapped together, his arms tied behind his back and his knees flexed with his soles facing up. The immediate effect of the falanga torture is described by the men as severe pain in the feet and lower legs, symmetric swelling of the feet spreading up to the ankle region, blistering and discolouration of the soles due to haematoma formation and sensory disturbances (pins and needles) with numbness in the soles in addition to impaired walking, making it impossible to wear shoes for several weeks after the event. The beating left no open wounds or fractures.

All men were subjected to *forced positions*. At the interrogation centre they were all handcuffed and chained to a grill in the door resulting in them being unable to lie down or sit when in their cells. The handcuffing left superficial abrasions in the wrist regions, but no radiating pain or other neurological manifestations. Additionally, some men were forced to maintain positions of prolonged standing with their arms elevated causing pain and pronounced swelling of the lower legs. One man was forced to lie on the floor on his back holding his extremities and head off the ground for prolonged periods. When his head or extremities dropped the torturers beat him with an axe handle or cane.

Various forms of *strapping and suspen-*

sion were applied to three men. One form was *chicken pole suspension*, suspension on an iron bar inserted behind the knee joints with the arms handcuffed in front of the knees.

In this position the men were beaten on the back and buttocks as well as being subjected to *falanga*. This torture method caused severe pain in the knees and left superficial abrasions in the ankle and wrist regions, but no joint dislocation or joint swelling and no radiating pain or other neurological manifestations. One man was *suspended upside down* hanging from a rope from the ceiling, with his ankles and wrists strapped together, his arms tied behind his back, knees flexed, head facing down and his body weight loading his shoulder joints. In this position he was beaten on the soles, the abdomen and the testicles. The man reports that this type of suspension caused severe pain in both shoulder regions and a sensation of dislocation of the shoulder joints, but no radiating pain or sensory disturbances in the arms. One man was suspended by his left upper arm for nine days; his arm was strapped at the wrist and fixed to the wall. He was supported only when standing on his toes.

Another man was subjected to *asphyxiation*. When subjected to *falanga* torture the pain was so severe that he began screaming. He did not stop screaming when ordered to and his torturers removed his blindfold and pushed it down his throat while also blocking the airways in the nose. This was maintained long enough for the man to believe he would die from suffocation.

One man was exposed to sexual torture, which included homosexual rape. This was most likely due to his single status and because he was above the standard age for marriage. Physically, the sexual assaults caused pain and soft tissue lesions in the anal region.

Notably, despite the force of violence of

the assault, no open wounds or fractures occurred. The apparent aim was to leave few visible permanent marks.

### **Alleged psychological torture methods**

All men allege to being exposed to solitary confinement, deprivation of basic needs, sleep deprivation, and threats during their imprisonment (Table 2).

The five men were detained in small, solitary cells with constant lighting and closed circuit cameras. The *solitary confinement* lasted for up to 31 months.

They were *deprived of basic needs* i.e. kept under unhygienic conditions without access to washing/bathing facilities and clean clothes and with only limited access to toilet facilities. Due to lack of food and loss of appetite all men had a considerable weight loss during the confinement (between 14 and 40 kg). At times, some men were denied their prescribed medication.

The men were exposed to *sleep deprivation* for prolonged periods (days) during which they became disoriented and some hallucinated.

They were *exposed to threats* of continued torture e.g. electrical torture, suspension from the window and off the roof, and executions. Those who had a wife and children experienced threats being made concerning

**Table 2.** *Distribution of alleged psychological abuse.*

No. of men	Subject no.	Torture method
5	1,2,3,4,5	Solitary confinement
5	1,2,3,4,5	Sleep deprivation
5	1,2,3,4,5	Deprivation of basic needs
5	1,2,3,4,5	Exposure to threats
4	1,2,3,4	Overhearing torture
3	2,3,5	Waiting
1	3	Mock-execution
1	3	Sexual harassment and sexual intimidation

their lives and well-being. The torturers told one man that his wife was imprisoned in a cell in the basement and that they would torture and assault her.

Four men reported *overhearing torture* in the form of screams and crying from neighbouring cells and at times they recognised the voices of their colleagues who had been arrested at the same time. Three men report *waiting* sitting blindfolded for several hours outside the interrogation room before being brought in for questioning and torture. One man reports of *mock-execution*: he was told he was to be executed and was blindfolded, handcuffed, shackled and led from his cell to a police van waiting in the prison yard. He was driven around in the van, but after a time returned to the prison and led back to his cell where he was told the execution had been postponed. The same man reports *sexual harassment and sexual intimidation*. Due to his single status he was accused of being a homosexual and threatened with sexual assault as well as the death penalty according to Shariah Law.

### Medical attention

A medical doctor attended the men in the al-Hair prison. They saw this prison doctor at regular intervals and after interrogation sessions. In addition, the doctor was sometimes summoned during the interrogation sessions to sign the prisoner fit for further interrogation. At times the men received medical care; at other times the prison doctor withheld treatment and medication.

Three men were hospitalised during their imprisonment. One was admitted to hospital three times: once after feeling dizzy and blacking out during interrogation, he was then diagnosed with atrial flutter, but was not informed of the diagnosis; another time with chest pains and dizziness after interrogation; and a third time when he

underwent cardiac catheterisation, but was not informed of the reason for or the outcome of the examination. Another man was hospitalised on several occasions (the man does not recall the exact number) because of high blood pressure, chest pains, or severe headache and sensory disturbances with cold sensations in the right arm. When he received visits from the British Embassy he was ordered not to discuss any health matters with the embassy official; two interrogators were present throughout the meetings. A third man was hospitalised on three occasions. Prior to the first occasion, the prisoner, who had no known predisposition to ischaemic heart disease, collapsed during interrogation with a heart attack. An acute angiogram and percutaneous coronary angioplasty was performed. Throughout the hospital stay the prisoner was chained to the bed and guards were present in the room 24 hours a day. One month later he was readmitted with a long-lasting angina attack after interrogation and had a second coronary angioplasty. On the third occasion he was hospitalised with severe, immobilising back pain caused by a direct trauma to the back after fierce beatings.

In addition, one man had a visit by a psychiatrist provided by the Canadian Embassy.\* Throughout the visit from the embassy the interrogators were present in the room and claimed that the man's injuries were sustained when they prevented him from committing suicide. This was not the case.

### Physical complaints at the time of examination

Since their imprisonment and exposure to torture the five men have had a series of

\*) The man has dual citizenship: British and Canadian

physical problems. These problems have been assessed and treated by various specialists after the men's homecoming. Four men report reduced overall physical fitness with general fatigue and lack of energy. Four men report deteriorated eyesight and hearing impairment and/or tinnitus. Four men have *dental lesions* resulting from beatings. Other complaints vary from person to person and include heartburn after eating, recurrent angina, and reduced libido.

The persistent and major physical complaints are mostly related to the *musculo-skeletal system*. Four men experience pain, stiffness and/or reduced range of movement in the back or lumbar-sacral junction. Other reported symptoms related to the musculoskeletal system are sensation of weakness in the wrists and fingers with reduced muscle strength on gripping, pain in the neck and shoulder girdle, intermittent pins and needles in the buttocks and thighs on prolonged sitting, and pain in the knee, shoulder and elbow joints.

Four men report persistent pain in the feet and ankle regions. They have slight pain or discomfort in the feet at rest, which intensifies with weight loading and walking – for two men to a degree causing impaired gait. They can walk only a limited distance during which the pain in the feet and lower legs intensifies and inhibits continued muscle activity. After resting the pain subsides and walking can be resumed (Table 3).

### Psychological complaints at the time of examination

Since their release and homecoming the men have had persistent psychological symptoms, in particular *sleeping difficulties* often due to *nightmares* during which they re-live the torture sessions, waking up sweating. In general the men experience *intrusive thoughts* with distressing images and unwanted memories

**Table 3.** *The most frequent physical complaints.*

No. of men	Subject no.	Physical complaints
5	1,2,3,4,5	Reduced physical fitness
4	1,2,3,5	Deteriorated eyesight
4	1,2,3,5	Hearing impairment and/or tinnitus
4	1,2,3,5	Pain, stiffness and/or reduced range of movement in the back or lumbar-sacral junction
4	1,3,4,5	Persistent pain in the feet and ankle regions

related to their torture and imprisonment combined with *flashbacks* triggered by situations or sounds reminding them of the torture situation. One man describes this as a feeling of not being in control of his life and life circumstances. In response to unwanted memories another man reports *avoidance* of potential reminders, emotional numbness and general unresponsiveness to the environment.

In addition all men report *impaired concentration and difficulties with attention and memory*, e.g. difficulties watching television or reading due to concentration lapses and bouts of absentmindedness resulting in losing track of conversations or forgetting the topic of conversations or the identities of the persons present. Some men report note taking in order to remember daily activities.

Four men have children; three men are married, and one is divorced. The men report *shame and guilt* especially towards their family for what they have been subjected to and for not being able to provide for them after homecoming. The shame and guilt towards the family have incurred marital problems. The men are also ashamed of having given information and naming people during torture and for confessing to the accusations publicly.

The men report *change in mood and personality*. They experience depressed mood,

fatigue, loss of energy, generalised anxiety and constant arousal. They also experience heightened sensitivity to situations of potential confrontation and mood shifts pertaining to physical intimacy. Accordingly, some men avoid crowds and social participation as these situations may precipitate anxiety reactions with heightened pulse, sweating, tremor and nervousness, especially in crowded or frenetic environments. The men describe themselves as formerly being patient and relaxed and now finding themselves irritable and emotionally labile, afraid of losing their temper. Before their imprisonment they perceived themselves as strong and outspoken; now they report perceiving themselves as weak and have low self-esteem.

Four men are unable to return to work due to physical and psychological symptoms. One man has returned to working as a chef despite being diagnosed with post-traumatic stress disorder and associated symptomatology related to the torture and imprisonment. He moved to the US with his family and has been offered psychological evaluation and assistance there but at the time of examination at the Parker Institute this treatment had not been established. The other four men have been offered limited assistance. One was offered psychological assistance and has received trauma counselling on a regular basis. Another was offered psychiatric evaluation and a brief counselling course of six therapy sessions. A third was offered a few psychiatric treatment sessions. A forensic psychiatrist assessed the last man, who was having weekly treatment sessions with a cognitive therapist at the time of the examination. He has also been offered social counselling. None of the men has been offered extensive, specialised treatment and care or financial compensation (Table 4).

**Table 4.** *The most frequent psychological complaints*

No. of men	Subject no.	Psychological complaints
5	1,2,3,4,5	Sleeping difficulties
4	2,3,4,5	Intrusive thoughts and flashbacks
5	1,2,3,4,5	Impaired concentration and memory
4	1,2,4,5	Shame and guilt
5	1,2,3,4,5	Change in mood and personality

### **Objective examination**

A systematic medical examination according to the guidelines offered by the Istanbul Protocol was performed on all men. The formal and informal contact during the medical interview and clinical examination was good. All men were well oriented in their own data and presented the torture history, the immediate symptoms caused by the torture and present symptoms and consequences of the torture in a consistent and unexaggerated manner. Mentally, the men appeared coherent with a slightly depressed mood. The registered mental reactions and psychological distress caused by the interview were foreseen and appropriate in the context.

The overall physical condition of the five men was good with normal vital signs at the time of examination. Findings suggestive of torture were found mainly in relation to the oral cavity and in the musculoskeletal system, including the feet and gait.

Concerning the oral cavity, four of the five men were missing teeth. Two had signs of tooth avulsions and sequelae after tooth extraction and in one there was evidence of dental lesions with avulsions from molars. Otherwise, there were few positive findings of evidence of torture at the general objective examination (Tables 5 and 6).

**Table 5.** *Distribution of findings at general objective examination.*

Body part	Objective findings
Skin	No cicatricial changes related to torture on the body surface or extremities including the soles. No cicatricial alopecia in wrist or ankle regions
Face	No evidence of fractures. No muscular soreness. No signs of motor or sensory nerve lesion
Nose	No evidence of fractures
Oral cavity	Signs of tooth avulsions and sequelae after tooth extraction. No signs of soft tissue lesion
Heart auscultation	No abnormal findings
Lung auscultation	No abnormal findings. No thoracic soreness or evidence of rib fractures
Abdomen	No soreness in the abdomen or renal region. No organ enlargement or fillings
Genitourinary system	Systematic examination not performed

### The musculoskeletal system (Tables 7 and 8)

Findings in the musculoskeletal system were in general unspecific and primarily confined to the soft tissues. The examination of the musculoskeletal system was organised under the following headings: cervical spine, upper extremities, thoracic and lumbar spine, pelvic girdle, lower extremities.

*Cervical spine:* One man had reduced rotation and lateral flexion bilaterally with increased muscle tone and tender points in

neck muscles and soreness at occipital muscle attachments.

*Upper extremities:* Increased muscle tone and/or tender points in the shoulder girdle were found in all five men. One had reduced active abduction and inward rotation with pain response at end-range of movement in the right shoulder and soreness at the rotator-cuff attachment on that side. Another had decreased extension in both elbow joints with a 20° extension defect on the left side and a 10° extension defect on the right side. Joint mobility was otherwise normal in all men. One had symmetrically reduced muscle strength at handgrip, finger spreading, extension and flexion over the elbow joints. Apart from that, examination showed muscle strength, tendon reflexes and sensibility to be normal.

*Thoracic and lumbar spine:* At inspection three men had a discrete lumbar-thoracic scoliosis. None had vertebral soreness and only one had reduced range of movement in the lumbar spine. At palpation, all five men had increased muscle tone and/or tender points in the lumbar muscles and two had tightness and soreness in ilio-lumbar ligaments. In one man dysaesthesia in the Th12 dermatome was present on the left side.

*Pelvic girdle:* Increased muscle tone and/or tender points in gluteal regions were found in three men and two had soreness and positive stress test of sacroiliac joints.

**Table 6.** *Reporting of pain per body region at the time of examination.*

Pain distribution	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
Headache	-	+	-	-	-
Neck and shoulder girdle	-	-	-	+	-
Upper extremities	+	-	+	+	-
Thoracic spine	-	-	-	-	-
Lumbar spine and pelvic region	+	+	+	-	+
Lower extremities	+	-	+	-	-
Feet including ankles	+	-	+	+	+
More than three regions	+	-	+	-	-

**Table 7.** Alleged torture method, reported immediate effects, complaints and objective physical changes.

	Effects	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
<i>Beatings around head/face</i>		+	+	+	+	+
<i>Immediate effects</i>	Swelling and bruising	+	+	+	+	+
	Open wounds and fractures	-	-	-	-	-
	Loss of consciousness	?	-	-	-	-
	Tooth extractions	+	-	+	+	+
	Tooth avulsions	+	-	+	+	+
<i>Complaints at examination</i>	Dental caries	-	-	+	-	-
	Gum disease	-	-	+	-	-
	Tooth extractions	-	-	+	-	+
	Headache	-	+	-	-	-
	Cognitive impairment	+	+	+	+	+
<i>Objective physical changes</i>	Tooth avulsions and sequelae after tooth extraction	+	-	+	+	+
	Soft tissue lesion	-	-	-	-	-

**Table 8.** Alleged torture method, reported immediate effects, complaints and objective physical changes.

	Effects	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
<i>Beatings at low back and kidneys</i>		Systematic	Unsystematic.	Systematic	Unsystematic.	Systematic
<i>Immediate effects</i>	Low back pain	+	+	+	-	+
	Reduced range of movement	+	+	+	-	+
	Irradiating pain	-	-	-	-	-
	Sensory disturbances in UE	-	-	-	-	-
	Blood in urine	+	-	+	-	+
<i>Complaints at examination</i>	Low back pain at rest	-	+	+	-	-
	Low back pain at activity	+	+	+	-	+
	Reduced range of movement	+	+	+	-	+
	Irradiating pain	-	-	-	-	-
	Sensory disturbances in UE	+	-	-	-	-
<i>Objective physical changes</i>	Vertebral soreness/soreness in SI-joints	-	+	+	-	-
	Abnormal posture	-	+	+	+	-
	Soreness and increased muscle tone in lumbar/pelvic muscles	+	+	+	+	+
	Reduced movement in lumbar spine	+	-	-	-	-
	Sensory disturbances in LE	-	-	-	-	-
	Abnormal reflexes	-	-	-	-	-
	Reduced muscle strength in LE	-	-	-	-	-
	Positive Laségués	-	-	-	-	-

**Table 9.** Alleged torture method, reported immediate effects, complaints and objective physical changes.

	Effects	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
<i>Falanga</i>		+	+	+	+	+
<i>Immediate effects</i>	Swelling and bruising	+	+	+	+	+
	Pain	+	+	+	+	+
	Sensory disturbances	-	-	+	-	+
	Impaired walking	+	+	+	+	+
<i>Complaints at examination</i>	Pain in feet at rest	+	-	+	+	+
	Pain in feet at activity	+	-	+	-	-
	Pain in ankles at rest	+	-	+	-	-
	Pain in ankles at activity	+	-	+	-	+
	Sensory disturbances	+	-	+	-	-
	Impaired walking	+	-	+	-	+
<i>Objective physical changes</i>	Reduced elasticity in heel pads	-	+	+	+	-
	Soreness in the plantar fascia	+	-	+	+	+
	Loosening of skin	-	+	-	-	-
	Sensory disturbances in soles	+	+	+	+	+
	Tender points in anterior tibial muscle	+	-	+	-	-
	Tenderness in Achilles tendons	+	-	+	-	-
	Ankle joint dysfunction	-	-	+	+	-
	Abnormal gait	+	-	-	-	+

*Lower extremities:* In two men, soreness was present in the medial knee region at pes anserinus and in one man in the iliotibial tract and the biceps femoris muscle. Two men presented with soreness and increased muscle tone in the anterior tibial muscle and at palpation along the medial aspect of the tibia. Soreness in Achilles tendons and restricted passive dorsal flexion and pronation in the right ankle joint was found in two men. Joint mobility was otherwise normal. Two men had discrete pitting oedema in the ankle regions. None had reduced muscle strength or reflex abnormalities. In one man diffuse hyperaesthesia was present in both knee regions, but apart from that none had sensory disturbances involving the lower extremities (excluding feet).

*Feet and gait:* The findings at clinical examination of the feet are summarised in

Table 9. They are predominantly confined to the soft tissues and characterised by soreness in the plantar fascia, reduced elasticity in the heel pads and sensory disturbances in the soles.

Soreness of the plantar fascia was present in four men and reduced elasticity in one or both heel pads in three. Sensory disturbances involving light touch and/or pinprick sensation in one or both soles were present in all men, whereas vibration sensation was normal.

None of the men showed evidence of fractures of metatarsal or tarsal bones and mobility of toe joints was normal.

Loosening of the skin from the underlying tissues in the soles was found in one man and one presented with symmetric pustular eruptions in the arches of both feet representing possible pustulosis palmo-

plantaris or pustular psoriasis. The skin rash that had appeared after exposure to falanga and pustular psoriasis is described to occur as a Koebner reaction to trauma.

In two men an abnormal gait was demonstrated at examination. In one there was a slightly abnormal gait pattern with avoidance of unwinding over the first toe. In the other the toes were kept in a flexed position during the entire gait cycle in order to avoid weight loading of the forefoot and weight loading was shifted with a compensatory relief over the heel region and lateral border of the foot.

#### *Ultrasound examination*

Ultrasound scans of the feet were performed independently by a medical doctor blinded to the results of the clinical examination.

The scans were performed according to standard protocol in all five men: the subject was examined in the supine position with both legs on a transverse cushion – the feet hanging freely. Scanning was performed with a Siemens Acuson Sequoia equipped with a 14 MHz linear array transducer. The plantar fascia was investigated in transverse and longitudinal planes from its origin on the calcaneus to the metatarsal heads. Digital images were stored from standardized transducer positions:

1. Proximal longitudinal image in a plane through the second toe.
2. Distal longitudinal image in a plane through the second toe.
3. Transverse image five cm distal to the origin.
4. Transverse image 10 cm distal to the origin.
5. Live sequence during passive extension of the toes from the mid portion of the fascia in a longitudinal plane through the second toe.

The scans demonstrated almost identical pathologies: the fascia had irregularly thickened superficial and deep interfaces. The internal layer (the layer between these interfaces) showed a loss of fibre structure compared to normals. These changes gave the fascia a distinct three-layered appearance. In transverse the median portion of the fascia was thickened and was indistinctly and irregularly separated from the surrounding connective tissue. The fascias behaved normally during extension – dorsiflexion of the toes resulting in tension of the fascias.

#### *Comparison of clinical findings and ultrasound imaging*

As illustrated in Table 10 there was an overall accordance between findings at clinical examination and ultrasound imaging supportive of the allegations of exposure to falanga torture. As can be seen from Table 10 the localisation and severity of objective findings at clinical examination are in agreement with findings at ultrasound examination in all of the performed scans.

### **Discussion**

The medico-legal examinations of the five men have demonstrated that all five cases can be labelled only as torture as defined in the UN Convention against torture article 1 where torture is defined as the intentional infliction of severe mental or physical pain or suffering by or with *the consent of the state authorities for a specific purpose*.<sup>1</sup>

Despite the prohibition of torture contained in the Universal Declaration of Human Rights, the world is far from seeing an end to this practice – a practice that can be stopped only by breaching impunity. Challenging torture therefore entails not only reparations for the individual but also challenging the perpetrators and bringing them

**Table 10.** *Clinical findings compared to ultrasound imaging.*

	<b>Findings</b>	<b>Subject 1</b>	<b>Subject 2</b>	<b>Subject 3</b>	<b>Subject 4</b>	<b>Subject 5</b>
<i>Clinical examination</i>	Elasticity in heel pads	Normal	Reduced bilaterally	Reduced bilaterally	Reduced in right foot, normal in left foot	Normal
	Soreness of plantar fascia	Yes, bilaterally	No	Yes, especially in the right foot	Yes, bilaterally	Yes, bilaterally
	Sensory Yes, disturbances	Yes, in the bilaterally	Yes, especially right sole	Yes, in the right foot	Yes, heel bilaterally	region of the left sole
	Skin loosely attached	No	Yes, mostly in the right foot	No	No	No
<i>Ultrasound scanning</i>	Thickened fascias	Yes	Yes, most pronounced on the right side	Yes, most pronounced on the right side	Yes, most pronounced on the right side	Yes, most pronounced on the left side

to justice. Health professionals have a role in both these tasks, an obligation spelt out in international declarations for doctors, nurses, and physiotherapists, largely endorsed by their national and/or international professional bodies.<sup>4-6</sup>

Medical documentation of alleged exposure to torture is based on the reporting of the degree of consistency between: 1) the torture history, 2) symptoms as described by the victim and 3) possible findings at medical examination. Standardised medical examination according to international guidelines has therefore become routine procedure in assessing torture victims for medico-legal purposes.<sup>3</sup>

In the present case of five British citizens alleging exposure to torture and ill treatment during detention and imprisonment in Saudi Arabia, there was a high degree of consistency between the allegations of psychological and physical abuse and the history of acute and chronic symptoms and disabilities described by these five men. The alleged torture methods were all well known and their after-effects are well described

consequences.<sup>7-11</sup> Likewise there was a high degree of consistency between allegations of abuse and the findings at medical examination.

Before imprisonment all the men were psychosocially well functioning. A psychological evaluation based on clinical testing was not included in the examination but the reported psychological symptoms were all typical reactions to extreme stress. The diagnosis most commonly associated with consequences of torture is post-traumatic stress disorder (PTSD), which includes several of the symptoms described by the men. Symptoms of PTSD may fluctuate over extended periods of time and may take a chronic course. Depressed mood and a perception of changed personality, shame, guilt and low self-esteem are likewise frequent and well described psychological consequences of torture.<sup>12-14</sup>

In most cases physical torture is directed towards the musculoskeletal system with the aim of inducing severe pain and, in the hands of the skilled torturer, few permanent marks. Characteristically the resulting soft

tissue lesions heal within weeks, leaving relatively few and unspecific findings despite possible subsequent physical disabilities. The absence of specific physical findings in the later stages therefore does not exclude the possibility that torture was inflicted.<sup>15,16</sup> Absence of evidence is not evidence of absence.

Pain in the musculoskeletal system is the dominant physical symptom in the chronic phase. The clinical picture is one of regional or widespread muscle pain, joint pain, pain related to the spine and pelvic girdle, and neurological complaints, mainly radiating pain in the extremities and sensory disturbances.<sup>9, 16-18</sup> Visceral symptoms (cardiovascular, respiratory, intestinal and urogenital complaints) and headache also prevail.<sup>19-22</sup>

Falanga is an ancient physical torture method widely practised especially in Middle Eastern countries.<sup>7, 10</sup> The effect of falanga torture is typically as described by the men. In the acute phase bleeding and oedema in the soft tissues of the feet and severe pain are characteristic with symmetric swelling and discoloration of the soles due to haematoma formation. Extensive ulcerations and gangrene of toes due to ischaemia have been described but are uncommon. Fractures of tarsal, metatarsals and phalanges are reported to occur occasionally.<sup>7, 15</sup> The acute changes disappear spontaneously after a few weeks as the oedema and extravasation of blood resolve but the induced soft tissue lesions may be permanent.

The cardinal symptom in the chronic phase is pain in the feet and calves and impaired walking.<sup>9, 15</sup> At clinical examination reduced elasticity in the foot pads, loosening of the skin, soreness and coating of the plantar fascia (aponeurosis), sensory disturbances in the soles, joint dysfunction, and myofascial changes in the lower extremities are reported as being characteristic although

not pathognomonic.<sup>15, 23</sup> The prevalence of clinical findings after falanga, however, is unknown. A normal examination of the foot does not rule out exposure to falanga.

The use of imaging in substantiating the clinical diagnosis and documentation of falanga is based on MRI and ultrasound studies showing morphological changes with a layered plantar fascia in torture victims exposed to falanga.<sup>24, 25</sup> These global changes involving the full length of the fascia are not seen in normals. The changes have not been described as part of any disease such as plantar fasciitis where there is a focal thickening at the origin of the fascia or plantar fibromatosis where there are focal areas with thickening more distally.

## Conclusion

This examination has demonstrated that all five cases can only be labelled as torture, as defined in UN Convention Against Torture article 1.

Despite this evidence the Saudi Arabian State denies torture of the five British citizens. The methods of torture applied and the medical examination of effects of torture indicate that torture methods were chosen deliberately so as to leave as few visible marks as possible.

It is further worth noting that a medical doctor attended the victims during and after torture sessions in order to assess and allow the type and force of violence deployed. Further, during the various hospitalisations the medical staff must have observed and recognised signs of physical abuse. This participation of medical staff was applied systematically as part of common prison practice despite the World Medical Association's Declaration of Tokyo from 1975<sup>4</sup> stipulating the obligations of the medical profession towards human rights, and in particular torture. The case of medical assistance in the

torture of five British citizens demonstrates that medical doctors violate ethical standards and are involved in the execution of torture in Saudi Arabia.

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