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# The death of an emperor – Mohammad Reza Shah Pahlavi and his political cancer



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Lymphoma;  
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Anwar Sadat

**Abstract** Mohammad Reza Pahlavi, the Shah of Iran, was toppled in the Islamic Revolution of 1979. A year later he passed away from lymphoma, a disease he had secretly battled for several years, but still it remains unknown exactly when he was diagnosed with cancer, if he was aware of his condition and who close to him knew about his illness. Following his 1979 exile from Iran, physicians from numerous countries became involved in his treatment, which was typified by political and medical intrigues, contributing to a suboptimal and dangerous medical care which may ultimately have contributed to his death. After acute surgery of his spleen in June 1980, the Shah's condition worsened and he eventually passed away on July 27. This study shows that the international intelligence organizations were probably aware of the Shah's disease, and that the Shah was not cared for in accordance with good medical practice.

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## 1. Introduction

In 1980, the Shah of Iran, Mohammad Reza Pahlavi died of cancer, and only nine months after, the medical correspondent of the New York Times, Dr. Altman<sup>1</sup> wrote: "Even today... some of the physicians who were intimately involved in the case still debate several critical points in the Shah's medical care." 30 years after the Shah's death, this debate is still ongoing. Unfortunately, few books and articles have been written that discuss the Shah in light of his health and the chaos that surrounded it. Some of them even contain false or incomplete information: for example, that the Shah had been treated at the Mayo Clinic<sup>2</sup> or that the State Department had no real information about the Shah's condition.<sup>3</sup> Only the British journalist William Shawcross<sup>4</sup> and the late Dr. Leon Morgenstern<sup>5</sup> have earlier given detailed accounts of the Shah's disease; hence, there is still a knowledge gap regarding the Shah's health care and the political aspects of it.

Considering the growing interest in the person of the Shah, not least in Iran and among the youth,<sup>6,7</sup> there is a need for amalgamating all available information and accounts to reveal details, not only of the Shah's health, but also the political questions surrounding it. Through a review of relevant literature, we here present an account of what happened to the Shah, from diagnosis to his death. An invaluable source for this article has been the letters of Professor Georges Flandrin to his teacher, Professor Jean Bernard, published in the memoirs of Queen Farah Pahlavi.<sup>8</sup> These letters document in detail, Flandrin's many clandestine visits to Iran, and the condition of the Shah's health.

## 2. The spleen

In discussing the onset and time for diagnosis of the Shah's disease, one school of thought deems that the Shah developed symptoms and was diagnosed in 1973/4,<sup>4,5,8-13</sup> while another considers that it was earlier.<sup>14-16</sup> The most detailed information about the Shah's symptoms was probably recorded by the Shah's former Minister of Court, Asadollah Alam, who kept a diary of all of their meetings. On noticing a swelling in the left upper abdomen on April 9, 1974, the Shah called upon his personal physician, Dr. Ayadi who diagnosed the Shah with a splenomegaly. After examination, Ayadi asked Alam to call upon the French hematologist, Professor Jean Bernard. Alam contacted Professor Safavian, who would later join the Shah's medical team, who took contact with Bernard whom he knew from his time in Paris as a medical student and later as a physician.<sup>17</sup> With Bernard not available, the Shah decided to wait until his annual checkup in Vienna by Professor Fellingner.<sup>9</sup> The diary mentions nothing about a possible earlier diagnosis or symptoms before April 9, which is curious, since the Queen writes that the Shah had symptoms in the autumn of 1973.<sup>8</sup>

Later, in April,<sup>11</sup> the Shah met Fellingner, and, according to the historian Andrew Cooper,<sup>18</sup> the Shah was informed that he had lymphoma. Alam had kept in contact with Bernard who, on May 1, 1974, left France for Tehran together with Professor Georges Flandrin. They met Safavian at the airport who showed them to the Hilton Hotel and then left. There, they were informed by Alam that their patient was the Shah. According to Safavian,<sup>17</sup> but contradicted by Flandrin<sup>8</sup> and other literature reviewed,<sup>4,5,10</sup> also the renowned French physician, Professor Milliez was present. Until the Shah's departure from Iran in January 1979, he would meet Flandrin a total of 39 times, 35 of them in Iran. During this first visit, the Shah was examined and diagnosed with chronic lymphocytic leukemia. Ayadi insisted that this information must not be revealed to the Shah, a request respected by his French counterparts. Several blood samples were taken back to France, which showed the presence of a so-called monoclonal immunoglobulin M peak, characteristic of Waldenström's disease. Being an indolent lymphoma, it was the perfect diagnosis to give the Shah; one in accordance with Ayadi's wish to avoid using the term cancer.<sup>4,8,10</sup> With the samples analyzed, the physicians decided to merely supervise the Shah, without providing any specific treatment.

On September 9, 1974, however, the Shah again complained of splenomegaly.<sup>9</sup> Accompanied by Bernard and Milliez, Flandrin arrived in Tehran on September 18, 1974, and started to treat the Shah with 6 mg of the chemotherapy medicine Chlorambucil.<sup>8</sup> In order to keep the procedure a secret, the medication was brought to the Shah disguised in containers of the harmless anti-malaria medication Quinercil.<sup>10</sup> For unknown reasons, however, the Shah was only treated for one week. Flandrin confirms this without going into any specific details.<sup>8</sup> Despite the Shah's condition being deemed to be so serious on this second visit that pharmacological treatment was started, a medical report received by the Shah on October 14, 1974 stated that he is in good health.<sup>9</sup> This report raises several vital questions which remain unanswered: who was this report from? What exactly was stated in the report? How could the report state that the Shah was in a good health, when he had started chemotherapy the previous month? Or alternatively, was he in a good health even though he was on chemotherapy? Safavian<sup>17</sup> states that the Shah was not aware of his cancer until the late 70s. To keep the disease a secret from the Shah was a decision made by his physicians in order not to affect the Shah's ruling of the country; thus, this report may have been altered in order to give the Shah the impression that he is in a good health.

The third time the French physicians met the Shah was in Zurich, on January 18, 1975. The Shah still had a splenomegaly; consequently, the dosage of the Chlorambucil was increased, and soon the Shah's blood count was normalized, the monoclonal M peak had disappeared and the spleen had gone back to normal.<sup>5,8</sup> In his next visit during February

1976, the Shah was again found to have splenomegaly and an abnormal blood count, making the physicians disturbed and worried. It was then revealed that the Shah's valet, having no idea that the containers labeled Quinercil, were in fact Chlorambucil, had ordered the wrong medication, and as a result the Shah used Quinercil for a period, explaining why his condition had worsened. In April 1976 treatment with Chlorambucil recommenced, and five months later the Shah's blood count was normalized.<sup>8</sup>

### 3. All the secrecy – A matter of national security

The Shah's health was kept a well-guarded secret, and considered a matter of national security. This was, however, quite a challenge, and even today it is unclear exactly who knew about the Shah's disease. According to Flandrin, only seven people were initially aware of the Shah's condition: Flandrin himself, Bernard, Ayadi, Alam, Milliez, Safavian, who had been included after Flandrin's second visit, and the Shah.<sup>8</sup> Furthermore, because of the secrecy, the examination of the Shah, as well as any analysis of his blood samples, could not be conducted in a hospital. Therefore, the Shah's private office at the Niavaran palace was used as a clinic. The Shah's disease was also kept a secret from both the Queen, who was first informed by the French physicians in spring of 1977 without the Shah's knowledge,<sup>8</sup> and the Shah's twin sister, Princess Ashraf, who was informed while in exile.<sup>19</sup> To further keep the secret intact, the word Chlorambucil was substituted with Quinercil in the Shah's medical journals.<sup>8</sup>

All this secrecy goes beyond just the Shah, since it directly also affected, among others, the Shah's physicians. Dr. Flandrin, who met the Shah over 30 times in Tehran, would, each time, secretly fly from his St. Louis Hospital in Paris to Tehran, not only withholding the information from his friends and colleagues, but also his own spouse. Every time, Flandrin, alone or with colleagues, would stay in a house in the Shemiran quarter in the northern part of Tehran, not leaving the house, except to visit the Shah, as it could jeopardize the secret.<sup>8</sup>

Several publications assert that the international intelligence community had no information about the Shah's disease; otherwise they would react differently to the turmoil in Iran.<sup>10,13,20,21</sup> CIA officer William Daugherty<sup>13</sup> believes, in conjunction with official document,<sup>20</sup> that no American officials had information about the Shah's illness, writing that, in the Shah's meetings with the former CIA director and US ambassador to Tehran, Richard Helms, the Shah always insisted on his good health. The claim by Daugherty is, however, contradicted by Andrew Cooper,<sup>18</sup> who states that Richard Helms was well aware of the Shah's cancer, telling his senior embassy staff that the Shah was being treated by French physicians and had written his will. Cooper<sup>18</sup> also observes that, in the summer of 1975, diplomats had been aware of rumors of the Shah's ill health. Babak Ganji,<sup>22</sup> a specialist in Middle Eastern politics, asserts that the Shah's health was well-known to both the CIA and US officials. Charles Cogan, former head of the CIA's Near East and South Asia Division, claims that French intelligence knew about the Shah's cancer as early as 1972,<sup>16</sup> and that US officials had become aware of this in 1976 since, and according to David Long from the State Department, US officials were

well-informed about the Shah's condition.<sup>14</sup> Professor Zonis<sup>23</sup> writes that British intelligence was being informed regarding the Shah's cancer since 1974. Whatever the truth, there were enough rumors to make the New York Times,<sup>24</sup> in September 1975, publish an article on the Shah's health because of "... persistent rumors in Tehran's diplomatic community that the reason the Shah sometimes appears drawn, worn and thin is that he is suffering from a lingering and increasingly grave malady." Safavian<sup>17</sup> contradicts this stating that the Shah was always feeling well, never complaining, and that was the reason for why he never understood he had cancer.

The Iranian scholar, Abbas Milani, interviewed the former Iranian ambassador to the US, Ardeshir Zahedi, who claims that there was a possibility that the Americans intercepted confidential telegrams sent between the Iranian embassy in Washington and Tehran. Zahedi recollects how an American official had asked him about the Shah's physical and mental health, which was indeed noticeable since, as Milani writes, there were no discussions in Iran or the West about the Shah's disease.<sup>21</sup>

It is consequently unclear if and how much the international intelligence community knew about the Shah's cancer. However, because of the cold war and the important role Iran and the Shah had in that era as an ally of the West standing against Soviet expansion, all the above would be enough to make the international intelligence community more than interested and curious in the health of the Shah, thus increasing their activities in order to understand the extent of the Shah's potential disease. It is thus difficult, with respect to the above, to state that the international intelligence community were fully blinded for the fact that the Shah's health was not optimal, and were probably aware of the Shah's disease.

### 4. Did the Shah know?

One of the most important and controversial questions is exactly how much the Shah himself knew about his illness. There are indications that the Shah did not know about the magnitude of his illness, though, in contrast, others believe that the Shah did indeed know that he had a life-threatening condition.

Morgenstern<sup>5</sup> asserts that the Shah was not aware of the seriousness of his disease until several years after being diagnosed in 1974. The word cancer was never uttered to the Shah himself. Alam's diary confirms the picture that the Shah may have been unaware of his condition. In his diary entry for July 9, 1977, Alam writes that the Shah's splenomegaly had gone into remission and now was "cured". The Shah, surprised, had asked Alam what went wrong in the first place and if it was malaria that had caused his splenomegaly. Alam responded that this is not the case, and that his tablets were deliberately marked as a medication against malaria "... so that nobody would realize what was really the matter."<sup>9</sup> Alam's writing creates some conflicting speculation; if the Shah was still, in 1977, unaware of why his spleen would be swollen, it suggests that the Shah did not know anything about his cancer. On the other hand, given that Alam informed the Shah that the tablets were disguised in order that no one deduce what the issue really was, then the Shah must have been aware of what "the matter" really concerned. Alam did, however, tell the Shah that his splenomegaly was perhaps because



of “some sort of blood disease”,<sup>9</sup> suggesting, again, that the Shah may have known nothing about any kind of cancer. A closer analysis of the tone in which the conversation has been written also gives the impression that the Shah may have not even known that he had some kind of serious disease.

Safavian<sup>17</sup> in his first interview about the Shah’s disease, in July 2015, states firmly that the Shah’s disease was kept a secret from the Shah until 1978 when Bernad and Milliez were going to inform the Shah about his cancer. They, however, never told the Shah since he already had understood, according to Safavian. This statement by Safavian is confirmed by Flandrin who, however, mentions nothing about Milliez. Flandrin states, in reference to a meeting with the Shah where they planned to tell him bluntly that he had cancer, that there is no doubt the Shah “understood what we wanted to tell him”, but eventually withheld the truth. Flandrin bases his assumption on a comment by the Shah in the mentioned meeting, saying that he only asked the physicians to help him maintain his health for only two years so that the Crown Prince, Reza, would finish his studies in the US and spend a year in Tehran.<sup>8</sup>

The Shah had, in a remark to Alam in Kish after feeling his swollen spleen, also said that the modernizing of Kish must go faster so that it can be finished under his lifetime.<sup>9</sup> Queen Farah considers this issue. She writes that, after his first symptoms in the spring of 1973, the Shah, four days before his birthday, on the October 22, 1973, had gathered, among others, the Prime Minister, Dr. Amir-Abbas Hoveyda, and the commanders of the armed forces in order to deliver to them his political testament. The Queen emphasizes that the Shah just had learned he was suffering from Waldenström’s disease.

After the incident with the Shah’s splenomegaly in April 1974, the Shah included both the Queen and the Crown Prince in the affairs of the country to a greater degree, conferring with the Prime Minister, among others about the state of the country several times each week.<sup>8</sup> The Shah was clearly preparing both the Queen and the Crown Prince, who were still too young to ascend the throne, to be ready to take over the ruling of the country. The Shah had in 1966 made the Queen, then only 28 years old, regent. This act of the Shah, placing a woman in power in a Muslim country, was, in itself, quite revolutionary.

Only one year after his swollen spleen-incident in Kish, the Shah had, according to the Queen told French President Giscard d’Estaing that he would not be in power in Iran for much longer.<sup>8</sup> All this would suggest that the Shah, if not aware of his cancer, at least knew he was suffering from a serious condition.

Since the Shah, after the April 9, 1974 incident started to talk about not being around for long and almost immediately began to engage the Queen and the Crown Prince in matters of state, it may be because he, in reality, had been diagnosed with a blood disease before April 9, 1974, with the splenomegaly making him understand the condition had now worsened. The fact that Alam’s diaries show some confusion may be because Alam himself did not know any details about the Shah’s health, or that the issue was so sensitive that he did not even write about it in the diary. In discussing this matter one can only speculate.

## 5. The bitter taste of exile

After a year of violent demonstrations in Iran, and his refusal to use military force against the demonstrators, the Shah left

the country on Tuesday January 16, 1979 for Aswan, Egypt.<sup>5,8,10</sup> The Egyptian President, Anwar Sadat, a long-standing friend of the Shah, met the royal couple at the airport, escorting them to the Oberoi Hotel on the Nile. Four days later, Flandrin was summoned, but only a routine physical examination was performed. On January 22, 1979, the royal couple set off for Morocco; first to the Janan Al-Kabir palace in Marrakesh, and then to Rabat and the Dar es Salaam palace. Flandrin visited the Shah twice, though unfortunately there is no specific information about his visits.<sup>8</sup> The Shah’s stay in Morocco soon started to cause problems for King Hassan, who himself was under heavy attack from domestic Islamists. That fact alone, compelled the royal couple to leave on March 30 for the Bahamas, and Nassau. Shortly after arrival, the Shah found a lymph node above his clavicle, which, after aspiration by Flandrin,<sup>8</sup> showed large cell lymphoma. Chlorambucil proved to be ineffective so a treatment with Vincristine, Procarbazine, Nitrogen mustard and Prednisone was implemented.<sup>4,5</sup>

### 5.1. No siesta in Mexico

For unknown reasons, the Bahamian government decided not to renew the royal couple’s visas, and they accordingly left the Bahamas for Cuernavaca, Mexico, on June 10, 1979. The Shah’s chemotherapy dosage was raised, but he developed a fever and jaundice. The Mexican doctors, not knowing about the Shah’s cancer, diagnosed the Shah with hepatitis and malaria, though this was soon ruled out and the Shah instead diagnosed with an obstructive jaundice.<sup>5</sup>

Probably because of the Shah’s worsening condition, one of his advisers, Mark Morse, contacted another of the Shah’s advisers in New York, Robert Armao, who sent Dr. Benjamin Kean, a specialist in Tropical medicine, to Mexico for further investigation. Both Morse and Armao were aiding the Shah on behalf of David Rockefeller, a longstanding friend of the Shah. While in New York, Kean, was told there was a problem with *Peter Smith*. Years earlier, Kean had been treating the Swedish banker, Marcus Wallenberg, under the pseudonym *Peter Smith*. By hearing this name again, Kean understood that his future patient should be an important figure, and thus surrounded by secrecy.<sup>4</sup>

Kean left New York for Mexico, but the Shah would only listen to his French physicians. Kean, feeling insulted, left, but was soon summoned back to Cuernavaca, where he met Flandrin and was informed about the Shah’s cancer disease. Flandrin was, however, surprised by Kean’s presence, stating that he did not need a specialist in tropical medicine.<sup>8</sup>

While Kean insisted the Shah should be moved to the New York Hospital, Flandrin felt that the hospitals in Mexico would be good enough to treat the Shah and discussed the issue with Dr. Garcia, the head of a Mexico City hospital ready to treat the Shah.<sup>8</sup> The Shah himself had agreed to being treated in a hospital, but would not go to the US, he stated: “How could I go to a place [USA] that had undone me? Increasingly, I began to believe that the United States had played a major role in doing just that.”<sup>12</sup> Additionally, also the Queen preferred a hospital in Mexico over seeking medical care in the US.<sup>8</sup> The Shah had even asked Flandrin and one of the royal couple’s most loyal friends in exile, Dr. Pirnia, a pediatricist, to search for a good Mexican hospital. Soon after, a

Mexican university hospital was chosen but Kean and Armao repeatedly advised against this, stating that an American hospital would be better. According to Princess Ashraf, Mexican physicians conveyed to the Shah that he should seek care in the US.<sup>19</sup> The Shah wrote that, if he had continued to stay in Mexico, special isotopes would have to be flown from Houston on a regular basis for his treatment.<sup>12</sup>

Rockefeller's adviser, Joseph Reed, without the Shah's knowledge, contacted David Newsome, Undersecretary of State for Political Affairs at the State Department, to discuss the Shah's need for medical care in the US. The State Department sent their medical director, Dr. Eben Dustin, to Cuernavaca, who confirmed that the Shah has a malignant lymphoma and that Mexico lacked the necessary equipment and specialist care to manage the Shah's medical needs.<sup>10</sup> The newly formed Islamic Republic, in contrast, believed the Shah's illness to be exaggerated and wanted to send their own physicians to examine him, which was, of course, declined.<sup>21,25</sup>

### 5.2. *The reluctant journey to the states*

Eventually, the American team prevailed, and the decision to allow the Shah into the US for medical care was taken, on October 20, 1979, by Jimmy Carter after concerted pressure from Rockefeller and Henry Kissinger.<sup>26,27</sup> Two days later the royal couple departed for the US.

The Shah was admitted to the New York Hospital's 17 floor under the pseudonym *David Newsome*, causing the real David Newsome, mentioned above, considerable frustration. At the New York Hospital, the Shah met Chief Physician Dr. Hibbard Williams and Dr. Morton Coleman, an oncologist. A computed tomography was performed, which showed splenomegaly and gallstones obstructing the bile duct, which explained the Shah's jaundice. Surgeon Dr. Björn Thorbjarnarson<sup>28</sup> performed a cholecystectomy, later receiving a great deal of criticism due to the fact that the Shah's spleen was not removed during the surgery.<sup>4</sup> The Queen<sup>8</sup> writes in her memoirs that she would later discover this surgery to have been carried out "clumsily" and that "... an anonymous patient was better cared for than someone known." One of the main problems with this surgery was that it was planned without any prior discussion with Coleman. The surgery was performed on the October 24 with a cholecystectomy and excision of a cervical lymph node. Additionally, several gallstones were removed. When the surgery was underway, Coleman was informed and asked Thorbjarnarson to also remove the spleen, but Thorbjarnarson did not feel right performing an elective surgery while performing an urgent cholecystectomy.<sup>28</sup>

Even though the surgery went well, the following cholelithoscopy showed a gallstone in the left hepatic duct. Thorbjarnarson states that he was not sure whether this stone had been removed, but repeated scoping and X-rays did not show any remaining stones.<sup>28</sup> After the cholecystectomy, the Shah issued a statement about his health for the first time, informing the public about his lymphoma.<sup>12</sup>

In late November, the Shah complained of right upper quadrant pain, cholangitis and high fever. A cholangiogram showed a stone on the top of the T-tube. Dr. Joachim Burhenne, a respected radiologist, was contacted by Thorbjarnarson, and, on the November 29, removed the Shah's gallstone

through a non-operative method he had devised himself.<sup>5,28</sup> Flandrin was furious with the whole farcical situation surrounding the surgery, and stated: "Amazement, disbelief, and even hilarity went through the medical world... It was not the best that American medicine could offer, but the worst, as can be find in any country in the world. It really was appalling."<sup>8</sup>

The histopathology of the removed cervical node showed malignant lymphoma, and the Shah was diagnosed with histiocytic lymphosarcoma, now called large cell lymphoma.<sup>5</sup> Radiation therapy of the cervical node was, after their initial denial of treatment for security reasons, started at the Memorial Sloan Kettering Medical Centre.<sup>5</sup> Ironically, years earlier, the Shah had donated 1 million dollars to Sloan Kettering, where the Queen Mother had been operated upon.<sup>11</sup> At last the management capitulated and the first of the Shah's ten radiation treatments began on November 9 by Chief Radiation Therapist, Dr. Florence Chu. As the radiation therapy came to an end on the November 27, Kean asked Coleman to leave because of a dispute, the nature of which is still not yet known.<sup>4</sup>

### 5.3. *Another journey to Latin America, Panama*

On December 2, 1979, the Shah left New York for Lackland Air Force Base in San Antonio, Texas. Once again he was shown to have a splenomegaly, and new blood tests were taken under the pseudonym *Raul Palacios*, which showed a deterioration of his hematologic status. Kean and Williams were summoned,<sup>4,5</sup> and asked for an urgent splenectomy. The Carter administration, in the hope of getting the American hostages in Iran free, was, however, keen on having the Shah leave. Therefore, the Shah declined further surgery in the US. After 13 days at the Lackland Air Force Base, the royal couple was moved to Howard Air Force Base, now known as Panama Pacific International Airport, and, from there, to Contadora Island in Panama, where they would stay at a house owned by the American ambassador, Ambler Moss. The security was coordinated by the soon-to-be infamous Colonel Manuel Noriega.<sup>5</sup>

The Panamanian president, General Torrijos, appointed his own physician, Dr. Carlos Garcia, to manage the Shah's medical care. In February 1980 the Shah's cancer flared up and once again Flandrin was summoned, although Armao and Keane tried to stop him.<sup>8,12</sup> As Flandrin arrived at the Kennedy Airport to depart for Panama, he was called over by the information desk. Robert Armao was on the phone, asking to meet him, whereupon Flandrin was informed he is no longer needed in Panama. Flandrin also met Kean, who made it clear that he was the Shah's personal physician and that Flandrin's services were not welcome. Flandrin states: "But I was determined to go; I had been naïve and ingenuous, but not anymore." Flandrin went against the will of Armao and Kean, and left the US for Panama that same afternoon. He would stay in Panama for one month, and while there, he was put in contact with Dr. Adan Rios, a US graduate oncologist, in whom Flandrin found trust.<sup>8</sup>

A blood test was performed, demonstrating pancytopenia. Flandrin's foremost concern, however, was the urgent need for a splenectomy. In order to take care of the "hematological intensive care" before and during the operation, Rios, through

one Dr. Andersson, contacted Dr. Jeane Hester, an expert in hemapheresis, the medical discipline of gathering blood elements for therapeutic purposes, who joined the Shah on March 6.<sup>8,29</sup> Flandrin also informed Kean, who traveled to Contadora together with Williams.

Flandrin wanted a splenectomy to be performed as soon as possible. Kean, in contrast, was opposed to any surgery, but eventually capitulated. However, a new conflict erupted. Flandrin and Garcia wanted the splenectomy to be performed at the Paitilla Clinic in Panama City, while Kean wanted Dr. Michael DeBakey, a cardiothoracic surgeon, to perform the surgery at the Gorgas Hospital, then a U.S. Army hospital in Panama City. Flandrin had little information about DeBakey, and accordingly had no opinion, but Hester and Rios were firmly opposed, stating DeBakey was no surgeon of the abdomen.<sup>8,10</sup> Kean prevailed, but Garcia, himself a part-owner of the Paitilla Clinic, insisted the surgery to be performed there, and made it clear that anything else would be unacceptable.<sup>12</sup> To further complicate the case, Thorbjarnarson states that he was contacted by Kean in early 1980 and asked whether he would travel to Mexico to perform the Shah's splenectomy. Thorbjarnarson did, however, not hear anything further from Kean about this issue.<sup>28</sup>

On March 14 the Shah was admitted. Even before the surgery commenced, they faced a problem in the lack of blood available for Hester to prepare. The surgery was on the verge of being postponed, when volunteers at the Gorgas Hospital donated blood.<sup>4</sup> At the hospital the Panamanian physicians denied DeBakey the chance to operate, having been insulted through being overlooked for the surgery themselves. As a result DeBakey left the country. The surgery was consequently postponed. The Shah had now become less eager regarding having his surgery there, concerned that if he stayed he might be killed by the Islamic regime in Iran. While in Panama, the Islamic regime demanded the Shah to be extradited,<sup>25</sup> and, in a meeting between Hamilton Jordan, Chief of Staff to President Carter, and Sadegh Ghotbzadeh,<sup>a</sup> a close aide to Khomeini and Foreign Minister of the Islamic Republic, the latter asked Jordan if the CIA would kill the Shah while in Panama.<sup>30</sup> The First Lady of Egypt, Jehan Sadat, wondered if Khomeini would go so far as to have the Shah killed on the operating table.<sup>31</sup> Consequently, on the March 23, 1980, without surgery, the royal couple left Panama and returned to Egypt.

#### 5.4. Back to the land of the pharaohs

The Shah and his entourage arrived at Cairo the same day, and he was admitted to the second floor of the Al-Maadi Military Hospital. President Sadat's personal physician, Dr. Taha Abdel Aziz, a cardiologist, already had a team available. Flandrin also joined, but was surprised to hear that DeBakey and his team, as well as Kean and Williams, were also invited, though it is unclear by whom. Suddenly, not only were five physicians responsible for the Shah's life, but they also disagreed on almost every single issue concerning his health. Flandrin had, nevertheless, some advantage in that he was able to form a good relationship with Abdel Aziz, and was a good

friend with the Egyptian hematologist Dr. Amin Afifi, President Sadat's son-in-law.

Three days after the Shah's arrival in Cairo, DeBakey and his six-member team arrived, and, on the March 28, 1980, at 8 pm, the Shah's splenectomy began. The spleen weighed close to 2000 g and was riddled with tumorous nodules; thus, a liver biopsy was taken, which later showed signs of multiple metastases.<sup>8</sup> According to DeBakey, the surgery was successful,<sup>32</sup> and later events, however, would prove just the opposite. Three days after the surgery the Shah complained of low posterior left thoracic pain, making Flandrin and the Egyptian surgeon Dr. Fouad Nour, suspect a subphrenic abscess, which DeBakey's Australian assistant dismissed.<sup>8</sup>

The Shah started chemotherapy after ten days, and, after two weeks, he was discharged to Koubbeh Palace, the residence of the royal family. By the end of April his condition deteriorated and an X-ray showed pleural effusion.<sup>5</sup> The Queen contacted Flandrin by phone who suggested that, since the Shah may have a subphrenic abscess, DeBakey must return to Cairo in order to re-examine him. It is unclear whether the Queen contacted DeBakey himself, but she states that those around him insisted that the Shah had a case of pneumonia.<sup>8</sup> The Shah's condition worsened, and because of this deterioration, chaos erupted: Princess Ashraf contacted Coleman who came to Cairo along with Dr. Thomas Jones. The Queen also called Flandrin, who had barely arrived in France, back again. The Egyptian physicians now had the main responsibility, yet once again DeBakey returned.<sup>4,5,11</sup> This melting pot of physicians resulted in chaos. Flandrin kept insisting that Shah was developing a subphrenic abscess, Coleman believed that the Shah's symptoms were due to salmonellosis and DeBakey, to Flandrin's surprise, insisted that the Shah's deterioration is because of the chemotherapy, the dosage of which he reduced.<sup>5,8</sup>

In early June the Queen called Flandrin once more. The Shah was having difficulties due to respiratory infections and the Egyptians were in need of a pulmonologist, so Flandrin brought with him the pulmonologist Dr. Hervé Sors, after a consultation with the world-renown pulmonologist Professor Phillippe Even. They both diagnosed the Shah with a subphrenic abscess. Coleman was also present in Cairo, and once again a conflict with Flandrin emerged; this time on how to treat the Shah's lymphoma.<sup>5</sup> The conflicts escalated, and by now even the Queen and Princess Ashraf were in deep disagreement over how the Shah should be treated. In this time of despair, President Sadat took leadership and confirmed Flandrin as the Shah's personal physician and the one in whom the final decisions rested.<sup>5</sup> Flandrin contacted the renowned French surgeon, Dr. Pierre-Louis Fagniez, who immediately traveled to Cairo. On June 30, the Shah was once again under the knife. Flandrin states: "Using Fagniez's technique, he had made a limited left subcostal incision to proceed directly to where the pus had collected. . . . Fagniez and the Egyptian surgeons were all beaming. They were in the process of draining a liter and a half of pus and necrosed pancreas debris."<sup>8</sup>

Morgenstern, himself a renowned surgeon, states that the time between the surgery and the drainage was too long.<sup>5</sup> Almost immediately after the surgery, *Al-Ahram*, the most widely circulated Egyptian newspaper, reported that the Shah's pancreas was injured during the splenectomy.<sup>4</sup> It was Nour who witnessed that he had seen that tail of the pancreas

<sup>a</sup> Ironically, Ghotbzadeh himself was in 1982 executed by Khomeini, on allegations of espionage.

being injured.<sup>33</sup> Flandrin confirmed this in a histology of the splenic hilum by finding pancreatic tissue.<sup>8</sup> DeBakey and his assistant present at the surgery, Dr. Gerald Lawrie, denied any injuries to the pancreas and stated that no drainage was necessary.<sup>4,5</sup> Morgenstern,<sup>5</sup> however, states: “In retrospect, it does seem likely that some pancreatic leakage initiated the process that led to the subphrenic abscess.”

## 6. The king's death

On the night of July 26, 1980, the Shah's condition deteriorated and he slipped into a coma. Flandrin and Fagniez diagnosed a massive internal hemorrhage and resuscitation was started. It was Ramadan; consequently, the Egyptian physicians had left to break their fast. They were all called back. The Queen was in chock, and wanted Flandrin to make a call to Alexandria in order to let their children know about the Shah's deterioration and return to Cairo. The Shah received eleven units of blood and regained consciousness. For a few hours he could talk with his family and friends. At 9.45 am on the morning on July 27, 1980, the Shah finally lost his long battle with cancer. The Queen<sup>8</sup> states: “The king breathed quickly twice, then drew in a long breath and stopped. It was over.” From under the Shah's pillow the Queen withdrew a little bag containing soil from Iran, the country he had reigned over for 37 years. President Sadat himself took charge of the state funeral ceremony and declared a state of public mourning. Two days later, July 29, 1980, the Shah had a state funeral and was brought to his temporary resting place.

In accordance with Islamic tradition, the Shah's closest friend, also his former foreign minister and son-in-law, Arde-shir Zahedi, washed the Shah's body before it was placed in a coffin decorated with the Iranian flag. The cortege with the Shah's body left the Abdin Palace for the Al-Rifa'i mosque accompanied by the Pahlavi royal family, President Sadat, President Nixon, King Constantine and Queen Anne-Marie of Greece, Prince Victor Emmanuel of Savoy, the Ambassadors of the US, West Germany and France, First Ambassador of Israel and Chargé d'affaires of Britain. The only Arab country attending, Morocco, sent one of King Hassan II's relatives, Moullay Hafid Aloui.

The funeral ceremony was, without doubt remarkable. Egypt's First Lady, Jehan Sadat,<sup>31</sup> describes it as follows: “No state funeral was grander. Anwar organized it all himself, overseeing even the smallest details. . . . There were more flowers than anyone had ever imagined. It was the most spectacular funeral that any of us in Egypt ever had seen, and the last chance to show the world that the Shah deserved better than the way he had been treated. Egypt at least, had not turned her back on a friend.”

The Shah's death put an end to an important era in the history of Iran. His death was also one of the most shameful debacles of the history of medicine. Morgenstern<sup>5</sup> states: “It was not a proud moment in world history, medical history, or the history of surgery.” Safavian<sup>17</sup> states that the Shah could have lived for 10 more years if politics had not taken over his medical needs and care.

The Shah's care was infected with political interference, medical misdiagnosis, careerism, confusions and conflicts. Even the Shah's medical records had been leaked and shown to representatives of the Islamic Republic by Kurt Waldheim,

then Secretary General of the United Nations, without any respect for one of the most sacred tenets of medicine, the doctor-patient confidentiality.<sup>25</sup>

## 7. Conclusion

This review demonstrates that it is still unclear exactly when the Shah developed his first symptoms and when he was diagnosed with cancer. It is also unclear how much the Shah himself knew about his disease although this review gives some indications that he was aware he had a fatal disease. We believe that his disease was, to some extent, likely known by the international intelligence community and foreign officials. In consideration of the Shah's medical care, it lacked qualified physicians at the right time. Had he been treated in accordance with good medical practice, he could have lived longer and perhaps even played a role in the future of Iran. Thorbjarnarson<sup>28</sup> states: “Some years later I was attending a conference in Hamburg, Germany. As my wife and I finished dinner one night, I found our table surrounded by a group of severely dressed men; the identification on their lapels said they were from the Islamic Republic of Iran. They wanted to know whether the Shah really had cancer. I reassured them that he had histiocytic lymphoma. They thanked me for the information. I think I heard one in the group say ‘he was the only one that could have saved us.’”

## Conflict of interest

None declared.

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