

**IN THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF ALABAMA**

DOYLE LEE HAMM,	)	Civil Action No.
	)	2:17-cv-02083-KOB
Plaintiff,	)	
v.	)	
	)	
JEFFERSON S. DUNN, Commissioner,	)	
Alabama Department of Corrections, et al.,	)	
	)	
Defendants.	)	

**NOTICE OF SUBMISSION OF EXPERT REPORT
OF DR. MARK HEATH RE. EXAMINATION OF
PETITIONER DOYLE HAMM ON FEBRUARY 25, 2018**

Bernard E. Harcourt
Bar Number: ASB-4316-A31B
Attorney for Doyle Lee Hamm
Columbia Law School
435 West 116th Street
New York, New York 10027
Telephone: (212) 854-1997
Fax: (212) 854-7946

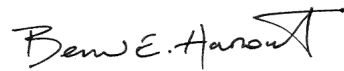
Dated: March 5, 2018

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OF DR. MARK HEATH RE. EXAMINATION OF
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Pursuant to the Order of the Court issued on February 23, 2018 (Doc. 78), modified orally during the conference on February 23, 2018, counsel for Plaintiff Doyle Lee Hamm hereby respectfully submits, as Appendix A, the preliminary report of Dr. Mark Heath regarding his physical examination of Doyle Hamm conducted on Sunday, February 25, 2018, at Holman Correctional Facility.

Should the Court need further information, Dr. Mark Heath is ready and willing to provide such information through a supplemental report and/or personal appearance before the Court.

Respectfully submitted,

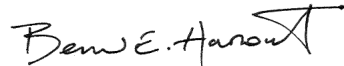
A handwritten signature in black ink, appearing to read "Bernard E. Harcourt", with a stylized flourish at the end.

Bernard E. Harcourt
Bar Number: ASB-4316-A31B
Attorney for Plaintiff Doyle Hamm
Columbia Law School
435 West 116th Street
New York, New York 10027
Telephone: (212) 854-1997
Fax: (212) 854-7946
Email: beh2139@columbia.edu

Dated: March 5, 2018

CERTIFICATE OF SERVICE

I hereby certify that on March 5, 2018, I served a copy of the attached pleading by electronic mail to opposing counsel, Assistant Attorneys General Thomas Govan and Beth Jackson Hughes at tgovan@ago.state.al.us and bhughes@ago.state.al.us, as well as to the Docket Clerk of the Capital Litigation Division of the Office of the Alabama Attorney General, Courtney Cramer at ccramer@ago.state.al.us.

A handwritten signature in black ink, appearing to read "Bernard E. Harcourt". The signature is stylized with a large, sweeping "H" and a long horizontal stroke at the end.

BERNARD E. HARCOURT
Counsel of Record

Appendix A

Preliminary report of Doyle Hamm examination
March 5, 2018
Mark. J. S. Heath, M.D.

My name is Mark J. S. Heath. I am a medical doctor with an active, licensed, full-time medical practice in New York State. I am board certified in anesthesiology. I practice daily at the New York-Presbyterian/Columbia Hospital in New York City, where I provide anesthesia for open-heart surgeries.

I examined Doyle Hamm on Sunday morning, February 25th, 2018, in a conference room adjacent to the Warden's office in Holman Correctional Facility.

Mr. Hamm was unshackled and seated in a chair. Some parts of the exam were conducted with him lying on a sheet on the conference table as no examining table was available.

Mr. Hamm was cooperative. I explained that the main purpose of the examination was to assess the extent of any injuries caused by the attempted execution on the night of February 22nd. I explained that the examination was voluntary, that he could end it at any time, and that he could decline any part of it at any time. He understood and consented to the examination. I explained that the results of the examination could, and likely would, be used in litigation that could, and likely would, be public. He understood and consented. I requested permission to create a photographic and video record of the exam, he consented to this also.

Also present in the room were Mr. Hamm's counsel Bernard Harcourt, his law associates Phoebe Wolfe and Nicola Cohen, and an officer from the ADOC. The Warden opened the door several times to check if anything was needed.

History:

Obtaining the history related to the execution attempt was interleaved with the conduct of the examination. Mr. Hamm stated that:

His standing dose of Norco had been switched to Tylenol No.3 when he arrived at Holman. On the day of the execution he was given T#3 at 2:30 AM and 10:00 AM, but the routine 6:00 PM dose was withheld. He stated that the T#3 was less effective at controlling his pain than the Norco.

He was taken from the holding cell to the execution chamber and strapped to the gurney. His arms were extended straight out on each side. There were approximately nine other people in the room, none of them were wearing surgical masks or hair covers. The room was brightly lit and there were multiple bright lights in the ceiling above the gurney.

Two men attempted IV access on his lower extremities, working simultaneously, one on each side. The men were wearing hospital scrubs and gloves, but no surgical masks or hair covers. Tourniquets were applied below the knees. They first attempted access in his ankles, then moved up to his calves. Mr. Hamm stated that each attempt involved one skin penetration but then multiple probing advances and withdrawals of the needle. The continued probing was painful. One of the probing needle advances was extremely painful and he felt that the "shin bone" in his right calf was reached by a needle. He estimates that the probing in his right calf persisted for about 10 minutes and states that he could feel them "rolling and mashing" the tissue in his leg. Overall he estimates that the two men spent about 30 minutes attempting IV access in his lower extremities. At no point did Mr. Hamm see them attach IV lines or hear them discussing attaching IV lines to test whether a catheter had been successfully inserted.

After approximately five attempts in his lower extremities the execution team members stated that they could not gain access. A few minutes later a man in a suit entered the room, accompanied by a woman with an ultrasound device. Mr. Hamm is of the understanding that the man is a doctor. The doctor was wearing a suit but no tie, he put on gloves but did not wear a gown or surgical mask or hair cover. He did not remove the suit jacket. The ultrasound device was plugged in, Mr. Hamm could not see the screen. EKG stickers were placed and leads attached.

The man stood by Mr. Hamm's right groin, the woman stood by his left groin and reached over his pelvis to place and hold the ultrasound probe on his right groin. He could hear the machine making a swishing noise. The man washed the right groin with cold liquid, a drape was placed, and the woman began applying the probe to the right groin. Cold jelly was used between the probe and Mr. Hamm's skin. They were saying "artery" and "vein" while manipulating the probe and they marked his groin with a marker.

The doctor advanced a needle into Mr. Hamm's groin. Mr. Hamm felt multiple needle insertions, and with each insertion he felt multiple probing advance-withdrawal movements. It is not clear whether local anesthetic was administered. Mr. Hamm felt the needle penetrating deep into his groin and pelvis. Mr. Hamm stated that this probing was extremely painful. Twice during needle advancement he experienced sudden sharp deep retropubic pain. The doctor requested a new needle several times. During this time Mr. Hamm began to hope that the doctor would succeed in obtaining IV access so that Mr. Hamm could "get it over with" because he preferred to die rather than to continue to experience the ongoing severe pain. He was shivering and trembling from a combination of fear and the fact that the room was very cold. He states that the room was the coldest room he had ever experienced in either Donaldson or Holman prison.

At one point a large amount of blood began to accumulate in the region of Mr. Hamm's groin. The blood soaked a pad or drape, and another one was applied. A man who had been watching from the foot of the gurney and talking on a cellphone

began frowning. This man left the room several times, each time returning after a few minutes. The final time this man entered the room he stated that the execution was over. The doctor stated that he wanted to keep attempting central access, and the man re-stated that the execution was over. The doctor applied a bandage to the groin but did not apply pressure or direct anybody to apply pressure. The doctor then moved to Mr. Hamm's feet and began examining them and palpating them, stating that he had not had an opportunity to attempt access in the feet. The man then told the doctor to "get out". The doctor and the woman who had been performing the ultrasound guidance were escorted from the room. The doctor did not apply pressure to the groin or provide wound care instructions before leaving the room.

Mr. Hamm was unstrapped and lifted off the gurney by several correctional officers. He was not able to support his own weight and almost collapsed, but was held off the floor by the officers. He was escorted back to the holding cell with officers supporting him by his arms because he was in too much pain to walk and support himself. At some point he was taken to the infirmary where a body chart was completed and band aids were applied to his legs.

Approximately one hour after he returned to the holding cell Mr. Hamm urinated and had gross hematuria. He described the urine as being bright red. He did not notice any clots. He has never previously noticed gross hematuria, including on the day prior to the execution. He had not ingested any food or liquid that was red colored, including beets. He had declined a "final meal" that evening, and had only eaten potato chips earlier that day. Over the following day, the next time he voided the urine was brown-yellow, the next time it was pale brown-yellow, and the next time (and subsequently) it was a normal yellow color.

Also approximately one hour after the execution Mr. Hamm developed a persistent irritating cough. The cough was in response to an irritation he felt in his upper chest, not in his throat. He could occasionally produce a small amount of white-yellow sputum. He denies any hemoptysis, fever, or chills. He did not experience any chest pain or shortness of breath during the execution.

Mr. Hamm's recollection was good, although I was mindful that he was recounting a long, complex, and stressful sequence of events he experienced.

I spoke with Mr. Hamm three times by phone after the examination. He has developed a "knot" in his right axilla that he describes as being the size of a grape and a golf ball. The mass is tender and he experiences a "stretching pain" in his upper right arm when he raises it. On 3/2/2018 he was seen in the prison clinic and told that he had infected lymph nodes in his right groin and right axilla. An oral antibiotic was prescribed.

Focused physical examination:

Oral temperature: 98.1

HR: 65 seated

BP: 121/77 (left arm, seated)

O2 saturation: ~95-98% (4 extremities)

Comfortable while seated but evincing pain when changing positions or climbing on/off the table. Spontaneous coughing multiple times during the exam. Walking slowly, stiffly, and with an asymmetric gait from pain.

Lower extremity puncture wounds (photo 1):

2 Left medial malleolus (photo 2)

2 Right leg, medial aspect, upper calf (photo 3)

1 Right medial malleolus (photo 4)

Right inguinal puncture wounds (photo 5):

There is a large tender hematoma/ecchymosis in the right inguinal region, with diffuse subcutaneous discoloration bordering the margins. The upper thigh and lower abdomen are tender.

There are approximately 6 puncture wounds approximately 2 cm inferior to the inguinal ligament. There is partial overlap of some of the puncture wounds making it difficult to determine precisely the number of separate needle penetration events. The femoral artery is pulsatile, with no appreciable enlargement.

Total of 11 lower extremities and right inguinal puncture wounds (photo 6)

Mental status: he states that he is stressed and is experiencing intrusive flashbacks to the execution. He is also experiencing nightmares. His sleep has been very poor, and is also disturbed by coughing. The flashbacks occur when he is alone, and involve imaging himself strapped to the gurney. He can feel his heart racing during the flashbacks. He is appreciative of the support of other death row prisoners who are asking what they can do to help him recover.

Assessment:

1 – large right inguinal hematoma from multiple failed femoral vein access attempts. This is typical of post-arterial puncture hemorrhage, but could possibly be caused by an unusually large leak from the femoral vein. The sudden bleeding that occurred during the procedure is more consistent with arterial puncture.

2 – gross hematuria is from penetration of a ureter, the bladder, the prostate gland, or the urethra. Bladder penetration is a rare but reported complication of femoral cannulation. The extent of the lower abdominal pain may be related to bladder or other visceral injury.

3 – new onset cough, etiology unclear.

4 – new onset tender axillary and inguinal adenopathy, attributed to infection. It is possible that the cough and adenopathy are caused by bacterial dissemination during or after the failed femoral cannulation. Bacteria may have been introduced into the circulatory system from the skin, from urogenital penetration, or from colon perforation.

5 – at risk for PTSD.

Note: when I spoke with Mr. Harcourt shortly after the execution I asked him to ask the staff to preserve and provide the execution log and any notes taken during the procedure, the needle and sharps disposal containers, and the used catheters and central line kits. I also asked to view the sheets, padding, and clothes worn by Mr. Hamm to help gauge the amount of blood loss. The Warden said that all preserved items had been taken to another location and were not available.

This report represents my preliminary findings resulting from my examination of Mr. Hamm on February 25, 2018. I reserve the right to amend this report in light of any additional information.



Mark J. S. Heath, M.D.
March 5, 2018



Photo 1: Lower extremity puncture wounds

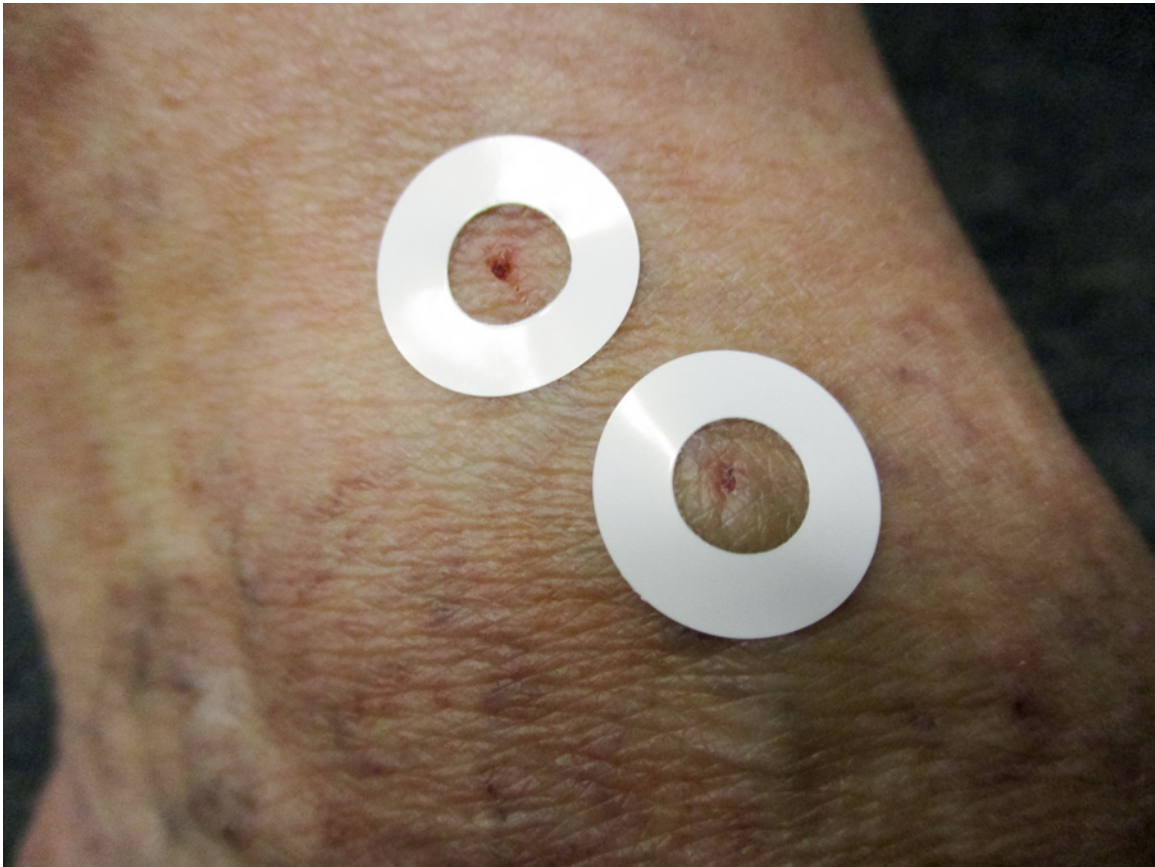


Photo 2: Left medial malleolus puncture wounds



Photo 3: Right leg, medial aspect, upper calf puncture wounds



Photo 4: Right medial malleolus puncture wound

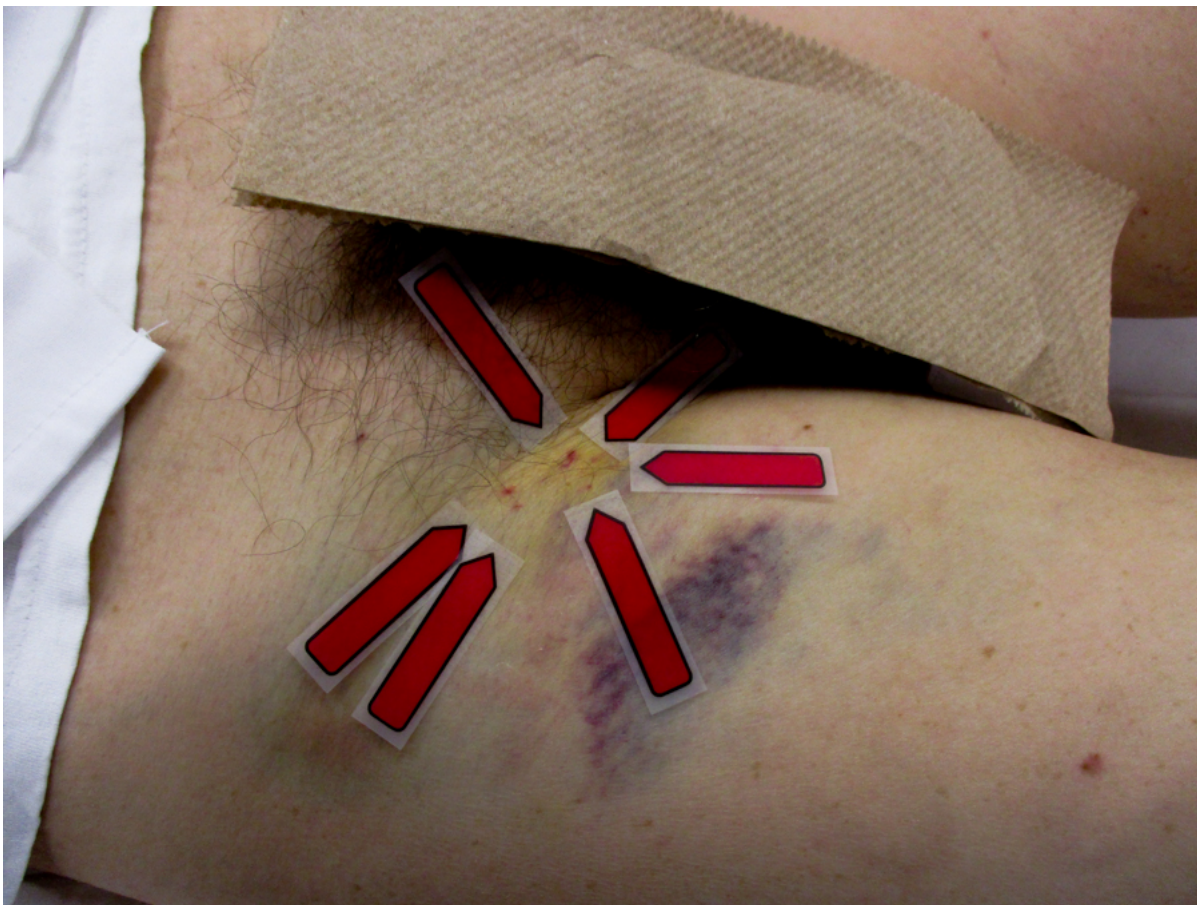


Photo 5: Right inguinal puncture wounds



Photo 6: lower extremities and right inguinal puncture wounds