

# *Medical Examination, Autopsy*

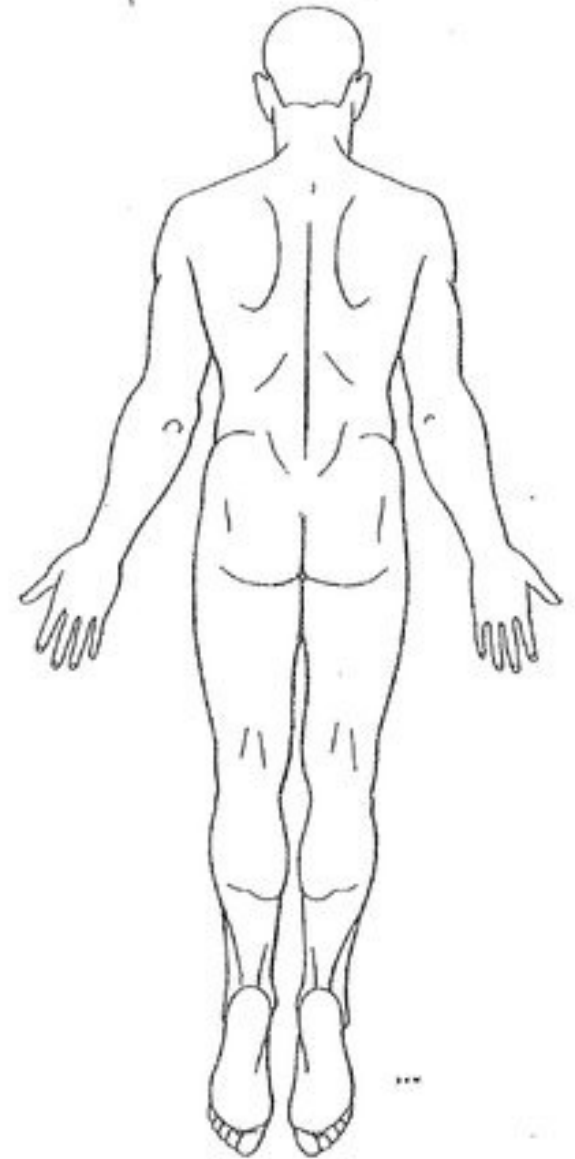
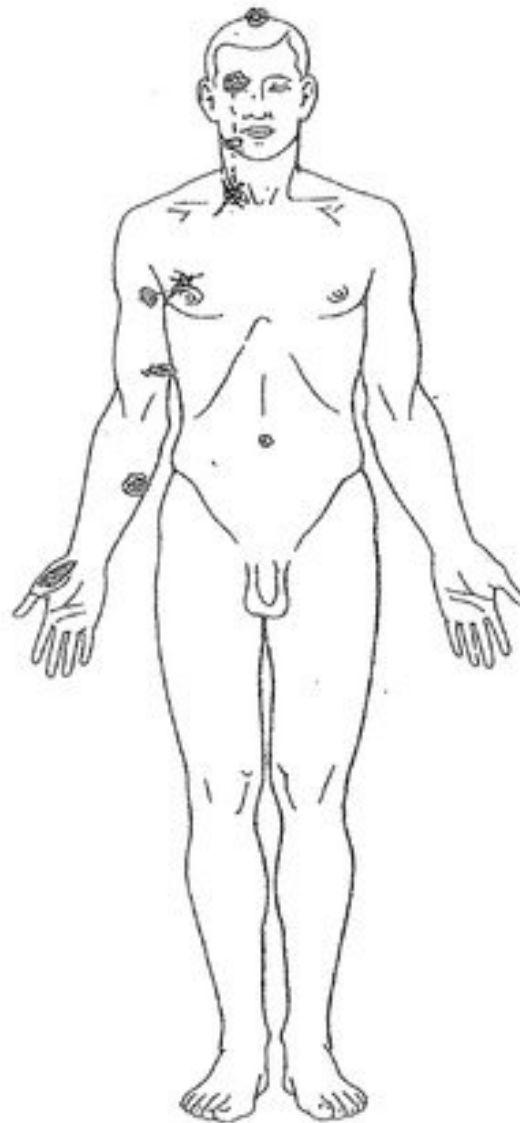
Marcello Di Bello

Lehman College CUNY

PHI 169 - Spring 2015

CASE NO. \_\_\_\_\_ NAME MICHAEL BROWN

Entry, reentry and exit perforations,  
Preliminary autopsy report





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**BROWN, MICHAEL**

**2014-5143  
Exam Case**

## Supplemental Microscopic Examination Report

### Microscopic Slide Examination:

**Skin and Muscle:** Sections of the tissue from the right hand show multiple fragments of skin and a single fragment of skeletal muscle. There is darkly pigmented foreign particulate matter present on the superficial surface of the stratum corneum and also embedded within the stratum corneum of the skin fragments. A mixture of pigmented and non-pigmented foreign particulate matter is present focally within the dermis of some of the skin tissue fragments and within the skeletal muscle tissue fragment. Some of non-pigmented particulate matter is polarizable. The previously described particles of foreign particulate matter are consistent with products that are discharged from the barrel of a firearm.

M.D.  
Assistant Medical Examiner



# Matter on MB's Right Hand

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So here, this is just regular, your know, normal tissue of the hand, this pinkish material, but here you can see these little darker areas, these little pigmented flakes, these are the foreign particulate matter that ... is not native to his hand...

Q: Matter, that is consistent with soot?

A: .... the definition of soot is actually burned gunpowder. So there can be different types of things in there. You can have burned, you can have unburned ... So soot could be in there

Q: Did you do any testing to determine if that is, in fact, product from a gunshot...Do you do gunshot residue testing in your lab?

A: In my area, I do not do that.



# Dirt?

Q: Could those black or darker particulate matters that we can see on that image on the slide, could that be dirt?

A: In my personal opinion it is not. Okay, the circumstances and things that I know about in this case why I feel that that's not dirt.



# The Wound on MB's Hand — A Close Shot

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Q: And so, in your opinion, is it your opinion that the barrel of the gun was not touching the hand of Michael Brown if, in fact, one is to conclude that this is gunshot products from a gun?

A: Correct.

Q: That the actual barrel of the gun would not have been up against the hand?

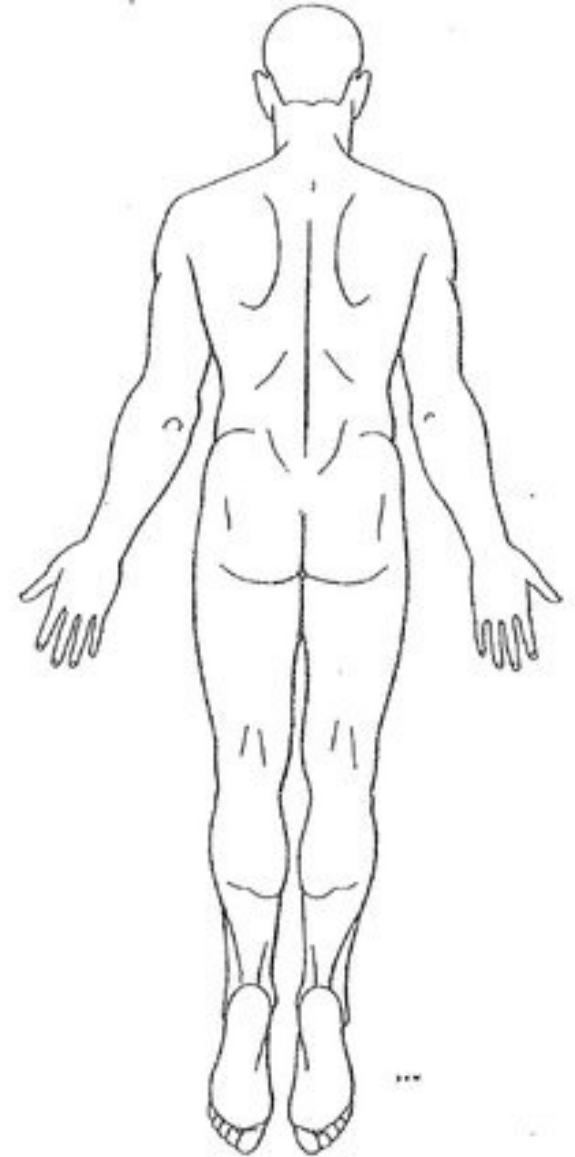
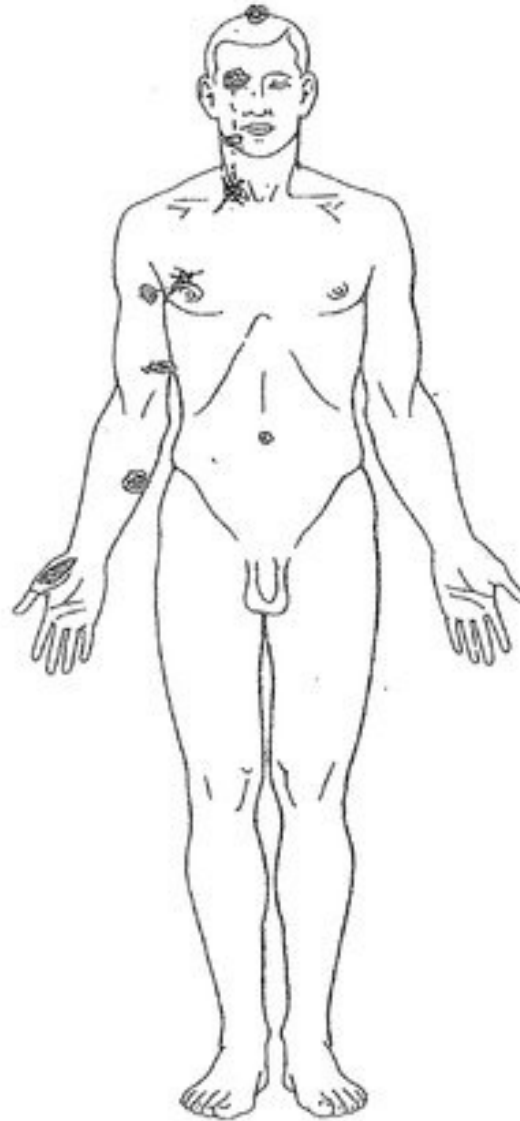
A: Correct.



# Autopsy

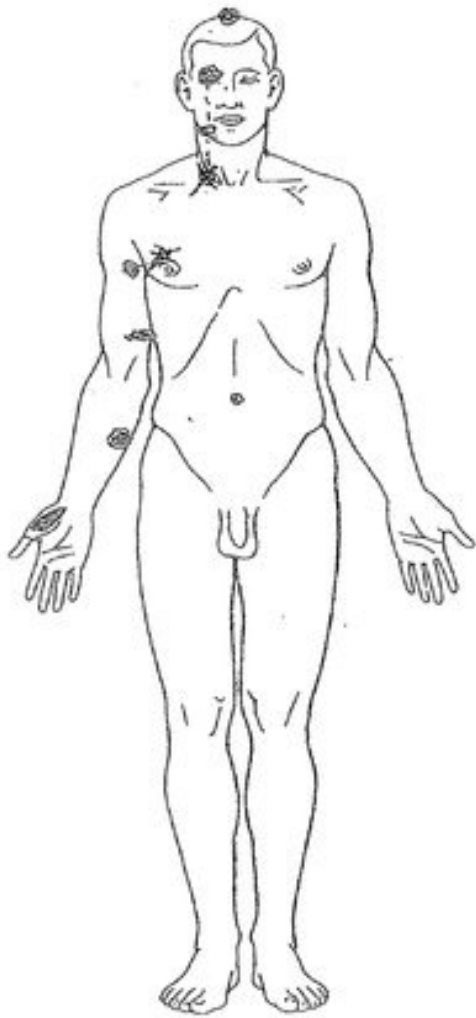
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# Gunshots and Grazes

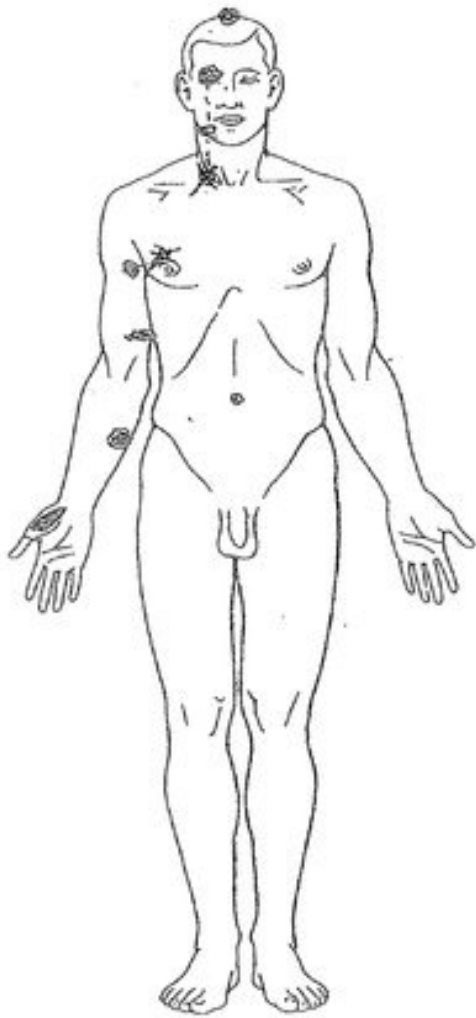


(1) There is a gunshot entrance wound of the vertex of the scalp. (2\*) There is a gunshot entrance wound of the central forehead. (3\*) There is a gunshot exit wound of the right jaw. (4) There is a gunshot entrance wound of the upper right chest. (5) There is a gunshot entrance wound of the lateral right chest. (6+) There is a gunshot entrance wound of the upper ventral right arm. (7+) There is a gunshot exit wound of the upper dorsal right arm. (8x) There is a gunshot entrance wound of the dorsal right forearm. (9x) There is a gunshot exit wound of the medial ventral right forearm. (10) There is a tangential (graze) gunshot wound of the right bicep. (11) There is a tangential (graze) gunshot wound near the ventral surface of the right thumb. [Autopsy Report, p. 2](#)

**NB: wounds 2-3, 6-7 and 8-9 are paired**



# Entry and Reentry?

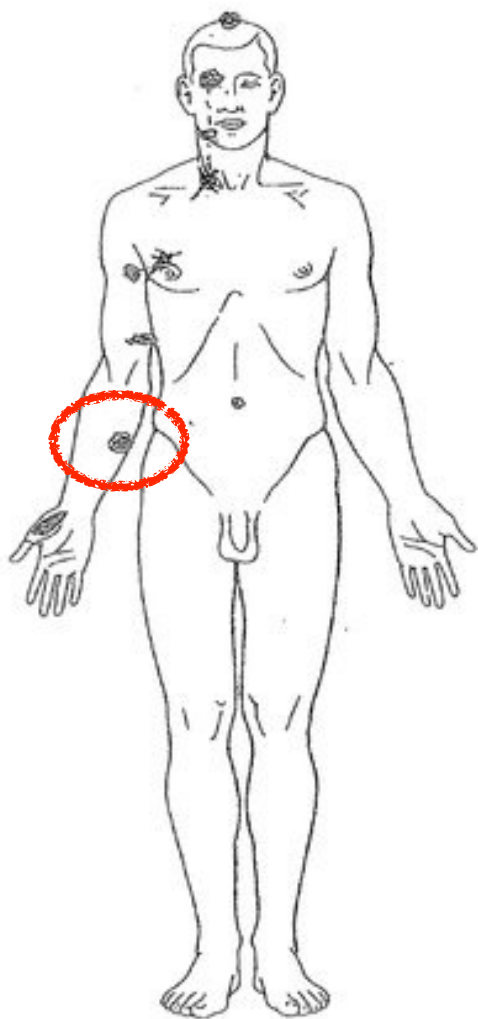


So the total amount of the gunshot wounds in this case is eight. There is eight separate gunshot wounds. Now, the possibility exist that the gunshot wound to the right clavicle and the gunshot right lateral chest could be reentry gunshot wounds. The gunshot wound to the arm or the gunshot wound to the forehead. It is my opinion that entrance wound here on the right clavicle is likely a reentry wound from that exit right there on right chin because the trajectories line up perfectly.



# Fracture of Right Ulna

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The right ulna was fractured and we picked that up on x-ray.

Q: And was that fracture consistent with a bullet passing through his forearm?

A: It was 100 percent consistent with bullet trajectory with an entrance wound here and an exit wound here, going through the right ulna.

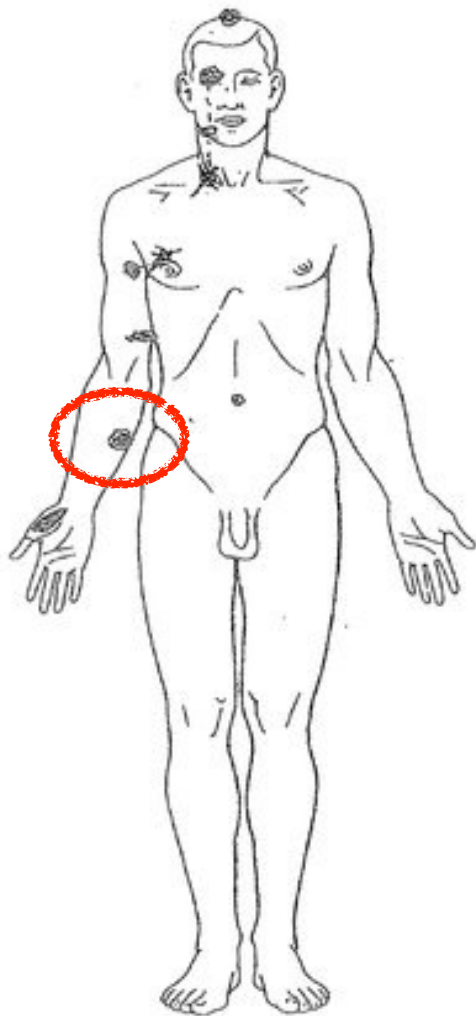
MS. WHIRLEY: ... wound consistent with being, with him being shot from behind, you understand what I'm saying? If someone is pursuing him and shooting, is that wound consistent with receiving that shot in that way?

A: ...a difficult question to answer because as you know, our arms can do all sorts of things



# Different Trajectories

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So if you are asking me could a shot from his backside produce that, I say yes. Because as you are running, if your arm is down like this, that surface, that very surface of your arm is exposed posteriorly. So a bullet coming from behind you could cause that injury.

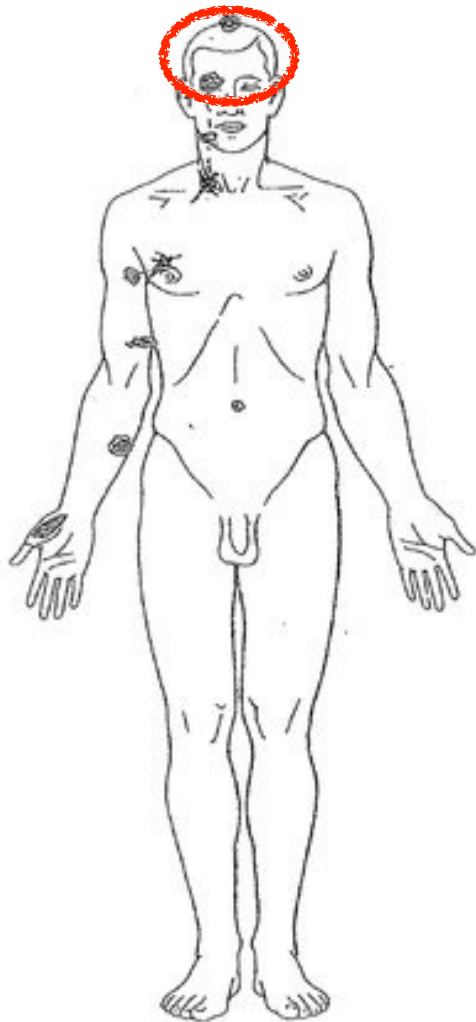
Q: Could it come from the front side?

A: Yes, depending on how your arm is. If your arm is out in front of you like this, a bullet impacting here could still exit here. If your arms are up like this, they have to be rotated in order for the bullet to impact here if the shooter is directly ahead of you. It's difficult, but I think there is a lot of different scenarios that can explain that trajectory.



# Scalp Gunshot

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Q: This bullet would have traveled downward... and then exited out the jaw?

A: Correct

Q: So the barrel of the gun would have to have been above, when I say above, it had to enter from this direction, correct? (indicating)

A: Correct. Again, it is difficult with trajectories. We have to imagine, there is a lot of different scenarios to explain this trajectory. Yes, if you just look at it in anatomic position, it goes sharply downward to the right and a little bit backward. I can manipulate my head in all sorts of ways in three dimensional space where the shooter, if we don't know where he is, there is a lot of different ways to get that wound.



# Let's Look at Some Reconstruction From the Internet

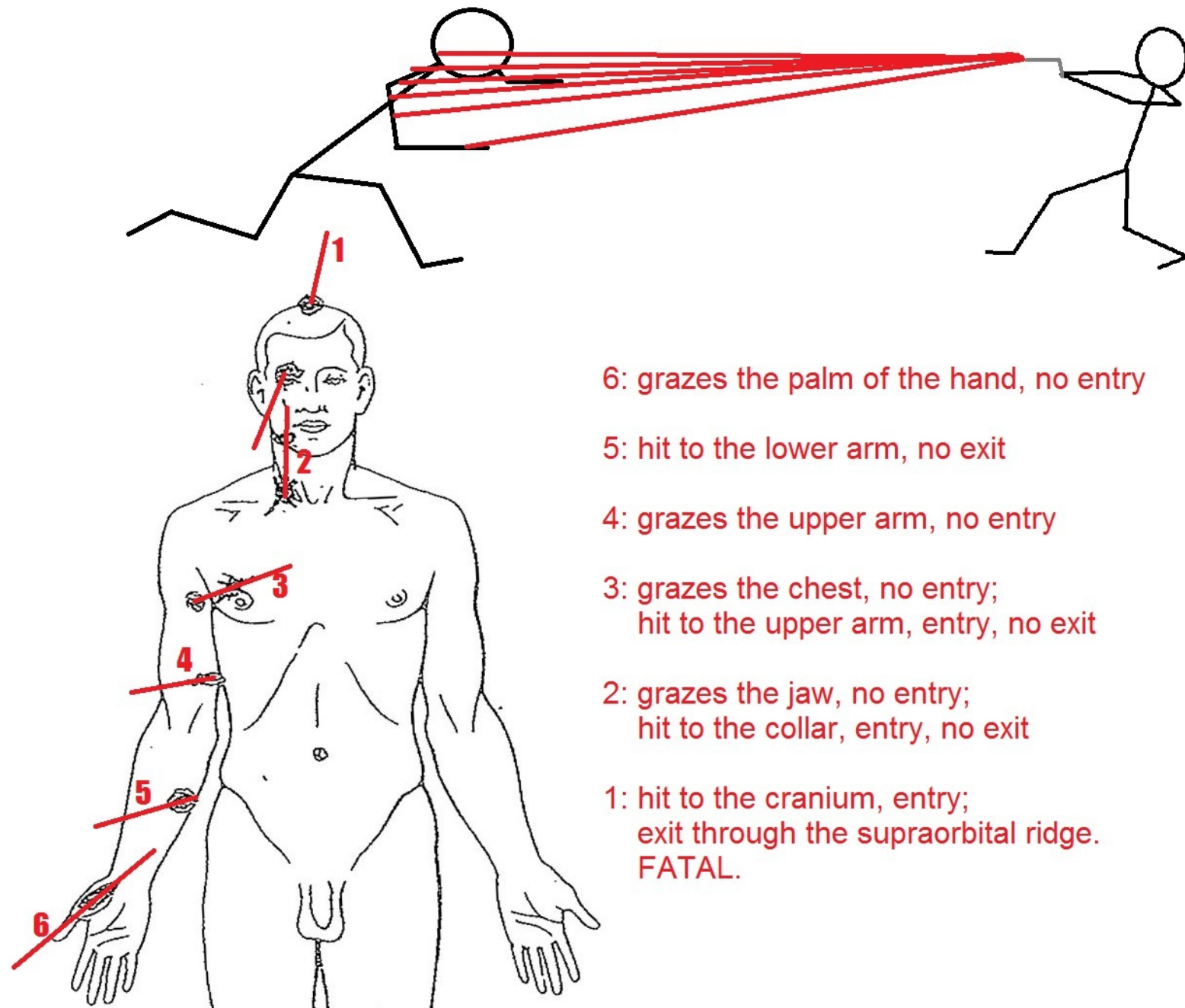
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First — “Charging Hypothesis”

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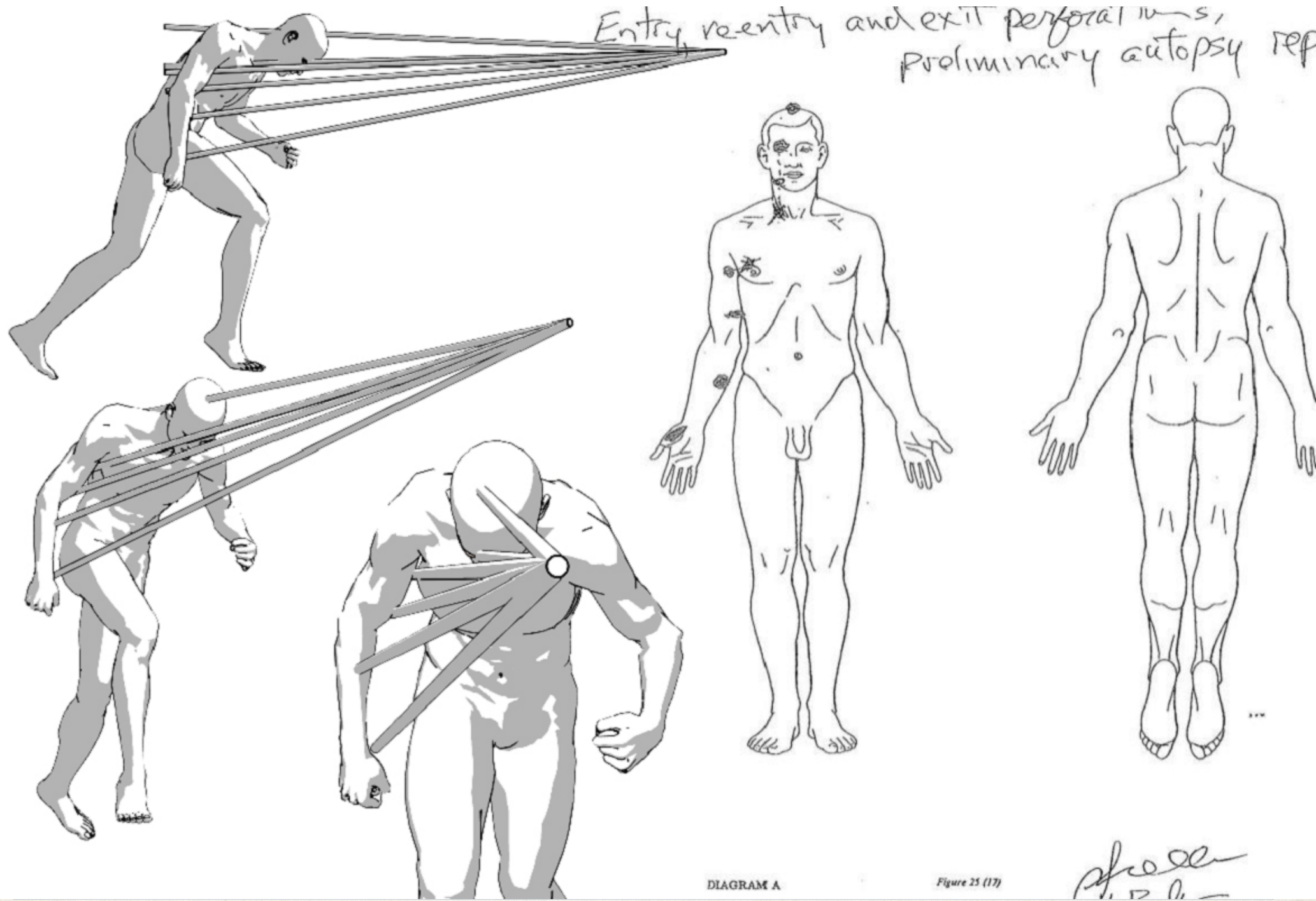




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# Does this Reconstruction Match the Autopsy?





Does this Reconstruction Match the Autopsy?



## Second — “Hands Up Hypothesis”

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