

REPORT OF SKELETAL INSPECTIONCase No.: 40-015

MICROFILMED

RECEIVED

Date: May 26, 1978

OCT 03 1979

SEP 5 '79

CHR RECORDS

CHR RECORDS

Type of Skeletal Material: An entire, exhumed skeleton.

General Condition of Skeleton: 98% of the entire skeleton was found. Since it was found in a metal vault, the skeleton and casket were in excellent shape considering a 31-year interment. The skeleton was relatively free of soft tissue and, at most, only clothing material had to be scraped from it. Some of the more trabecular bone was just starting to soften and disintegrate and much caution had to be exerted while cleaning those areas. All cortical areas are in excellent shape.

Up to this point, no preliminary count, per se, has been done. However, R. E. Toohey, by alpha-counting thoracic vertebra #1, has determined that there is indeed plutonium present in the skeleton.

Axial Skeleton

Skull: 100% of the skull is present. Even though the body was autopsied after death, the cranium was not opened. As of this date, the cranium still remains intact. There are no major changes in the skull that can be seen grossly. Some of the thinner bones, the lacrimals for example, have been slightly eroded. This case had a full set of false teeth.

Mandible: 100% present in excellent condition. Again, this case had a full set of false teeth. There are bilateral malformations of the mandible in the areas of the third molars that may warrant comment by the radiologist.

Hyoid: The hyoid was not found. However, it appears that the thyroid cartilage has calcified, is hard as bone, and is still intact. Note that x-rays show an actual trabecular structure.

Vertebrae: 100% of the cervical were found in excellent condition with no noticeable changes.

100% of the thoracic were found in good condition. The middle to latter thoracic vertebrae show a soft, delicate spinous process and lamina. It will be noticed that some are so delicate that it was decided to not clean thoroughly some areas.

0003872

Vertebrae: (Cont'd.)

About 96% of the lumbar vertebrae were found. Lumbar #2 and #3 were sampled at autopsy in 1947. A small section (estim. = 1/2 inch) was cut from the middle of the body of lumbar #2, leaving it in two pieces. About an inch of the anterior body of lumbar #3 was also sampled.

Ribs: Twenty-one identifiable ribs were found along with numerous fragments which have been weighed separately. There are three broken ribs on the right and one on the left which appear to be broken because of slight erosion. Right rib #12 was not found and left ribs #11 and #12 were not found; it is presumed that much of these are included in "rib fragments". Right rib #4 is much shorter than left rib #4 and, according to the literature, was sampled at autopsy in 1947. All ribs below rib #8 on both sides show extensive erosion on both ends. The shafts are soft but in good form.

Sternum: The manubrium and body are present 100% and in excellent condition. The xiphoid process is missing.

Sacrum: Almost 100% present. The sacrum is in recognizable shape but is so soft and "crumbly" that it was not cleaned at all lest it be destroyed. No obvious changes are seen.

Appendicular Skeleton

Scapula: Being essentially the bones lowest in the casket, both scapulae have severely eroded scapular blades. It is estimated that there is 60% of A4 present and 65% of A5 present. The rest of both is still intact. The glenoid cavity area is not eroded at all while the tips of the acromion and coracoid processes show mild erosion. There are no pathological changes seen grossly.

Clavicle: Both are present 100%. No gross changes seen.

Innominate: Both are present 100%. No pathological changes observed grossly. The auricular surfaces, however, have a soft, fragile consistency as seen in the sacrum. As of this date, the right has broken at the auricular surface and the left, even though cracked, remains intact.

Long Bones: All present 100%. No pathological breaks, changes, etc., observed grossly. Any erosion is at an extreme minimum and is most pronounced at the proximal ends of the femora. In spots, it is noticed that the heads of the femora were starting to disintegrate similar to the sacrum.

Patella: 100% present. Normal. No erosion.

Hands: 98% recovered. I0 and I9 are missing. All others appear normal and erosion is at a minimum.

Feet: 85% recovered. All tarsals were found in excellent condition. All ten metatarsals and both first proximal phalanges were found and identifiable. All others are missing except for what is referred to as "feet fragments". No gross changes from the normal are observed.

Skeletal Summary: 98.13% of a skeleton was successfully exhumed in excellent condition providing us with a vast amount of bone from a plutonium injection case. Some areas of trabecular bone are soft and fragile but all cortical bone is normal.

It should be noted that many of the bones including the skull show red tinting. It seems as though this red marking is on the surface of bone in what used to be highly vascularized areas. It should also be noted that the patient at one time did receive a carmine dye to trace fecal samples. It will be interesting to see if this tracer made it to bone or if all of this can be correlated in some way.

Inspected By: _____

J. W. Forkal
J. W. Forkal

JWF:llf

0003873