LAST WORD SOCIETY

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The Death and Mortal Remains of Francisco Pizarro

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ABSTRACT: When Francisco Pizarro was assassinated in 1541, he was buried near the Cathedral of Lima, but was later moved into the crypt under the altar. In 1891 mummified remains were identified as those of Pizarro and placed in a sarcophagus on public exhibition. In 1977 bones were discovered in a walled over niche in the crypt. The skull was in a lead box engraved with Pizarro's name. Which remains—the bones, or the mummy—are those of Pizarro? This question and more can now be answered. This paper will give evidence of the exact wounds that Pizarro received in his final sword fight, as well as a facial sculpture of the skull now identified as that of the conqueror of Peru.

KEYWORDS: physical anthropology, Francisco Pizarro, historical background, historical assassination, skeletal trauma

History

Francisco Pizarro, soldier of fortune, lieutenant of Balboa in Panama, conqueror and governor of Peru, died in Lima at the hands of assassins on 26 June 1541 [*1*]. Pizarro was murdered by the "men of Chile," the followers of Diego de Almagro, Pizarro's partner and lieutenant, who had been executed by Hernando Pizarro, Francisco's eldest brother. The classic historical account of the death of Pizarro is that of Prescott [*1*]. Ludeña [*2-4*] has consulted manuscripts unavailable to Prescott; most of the following history is taken from Ludeña.

Hernando Pizarro knew that the "men of Chile" were plotting Pizarro's death. These men were the ones who had done much of the most difficult fighting. Since they had not been permitted to share in the incredible wealth extorted from the Peruvian people when the Inca was held hostage, they conquered Chile. Finding little of value to a Spaniard there, they were

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ruined men with large outstanding loans. Hernando was jailed for life for his part in the execution of their leader, Diego de Almagro. Hernando learned that there were plots against the Marquis and warned his brother against ever meeting with them again as Hernando left for Spain. When Francisco Pizarro went to Cuzco in 1540 and awarded land and Indian workers to his relatives and friends, news of plots to kill him quickly circulated in Lima. The plans might have been delayed, except that the Spanish authority, in route to Lima to hear the complaints of the bad treatment of Almagro's men, perished in a shipwreck. The "men of Chile" assumed Pizarro had actually ordered the ship sunk; thus, their last chance for justice disappeared and the final plans for the assassination were laid.

In June of 1541, only five years after landing in Peru, Pizarro was warned by a priest who had heard the confession of one of the conspirators that he, his secretary, and his friends would be attacked as they returned from mass on the morning of the 26th. Pizarro shrugged off the warning but, as a precaution, feigned illness and did not attend mass. He shared the story with the vice mayor, Juan Belásquez, who assured the governor that he was safe as long as "the rod of justice" was in his hand [*1*]. The plotters must have suspected the plot had been discovered, so they took immediate action.

While Pizarro shared his midday meal at his residence with 15 to 20 guests, including Martín de Alcántara (Pizarro's half-brother on his mother's side), Vice Mayor Belásquez, cavaliers, and the bishop-elect of Quito, the 18 to 20 [*1*] conspirators crossed the Lima's Plaza de Armas in front of the governor's palace shouting their intentions. (Ludeña [*2*], quoting Martín de Lezana, said there were 7 or 8 conspirators.) When the alarm was raised in the palace, Pizarro calmly directed that the door at the top of the staircase be secured. Most of the dinner guests exited by climbing down to the gardens. Belásquez, his hands occupied in scrambling down the side of the palace, carried his rod of justice in his mouth, thus not betraying his assurance to Pizarro [*1*].

Note that most of these deserters were lightly armed, whereas the attackers were fully prepared (see Munda [5] for a full description of the armament of the attackers and defenders). Many were killed or injured at the entry to the house; fortunately, some survived as witnesses to the attack. When Francisco Hurtado de Hevia [*2*], the officer who was ordered to lock the door, went to carry out his orders, he partially opened the door to negotiate rather than following instructions completely. Negotiations came to a sudden and sharp conclusion, and the conspirators gained access to the living quarters. There were shouts to "arm yourself, arm yourself, the men of Chile are coming to kill the Marquis, my master . . ." [*2–4*]. Pizarro apparently tried to fasten the leather straps of his protective armor, a slow and awkward task, while Alcántara and three or four pages and cavaliers attempted to fight off the attackers. Pizarro threw aside the armor, held a shield on his left hand and forearm [*4*], and with his sword in the other hand went to aid his loyal comrades, who were already suffering from multiple wounds. Finding himself alone after the collapse of his last protector, Pizarro taunted his enemies. Killing at least two attackers, the old warrior continued to fight, but when a third unsuccessful assassin was shoved against his sword, Pizarro was unable to clear his blade and received a wound in the throat. He fell to the floor while several of the conspirators thrust their rapiers into him. He was dispatched while on the floor. The plotters remarked, upon leaving the scene of the battle, at his bravery, "how valiant was the Marquis," and that of his brother-in-law, "how well that villain Francisco Martín de Alcántara fought" [*2–4*]. The assassins wanted to cut off Pizarro's head and remove the body, but they were persuaded not to by the Bishop of Quito.

According to the chronicles, that evening, Doña Inés Muñoz buried her consort, Francisco Martín de Alcántara, and Pizarro behind the cathedral on the side of the Plaza de Armas. Four years later, his bones were exhumed and moved, along with his swords, and deposited in a wooden box in the main altar of the Lima cathedral, according to wishes expressed in his will ("my body is to be placed in the *Iglesia Mayor* of the City of Kings . . .

in the main chapel" [2-4] and endowed by a large gift to the cathedral (El Acta de la Exhumacion de los Restos de Don Francisco Pizarro de 1544). In 1551, Doña Francisco Pizarro Yupanqui, daughter of the Marquis and Doña Inés Yupanqui Huaylas, gave 5000 measures of gold in order to construct a special chapel in the church. Money was given for perpetual care. The bones were placed in a wooden box covered in black velvet and decorated with the cross of Santiago. A series of building episodes changed a new cathedral under construction, until in 1605 the third and final building phase was completed. In 1606 the mayor asked permission of the church to move Pizarro's remains to the new construction; the remains were moved on 4 July 1606. A major earthquake in 1609 caused considerable damage to the new church. Nonetheless, plans continued in its enlargement, except that the height was reduced from 22 to 17 m. After 25 years of work, in 1622, the construction was completed. In April of 1623, relatives asked that the bones of the Marquis and his sword and spurs be sent to them from the main city building. Sometime between 1623 and 1629 the bones were moved again.

In 1661, a proclamation attesting to the existence of the remains of the man destined to become Saint Toribio (Peru's first saint), mentioned the presence of the wooden box covered with brown (faded?) velvet and a lead box with the inscription, "AQVI ESTA LA CABECA DEL SEÑOR MARQVES DON FRANCISCO PIZARO QVE DESCVBRIO Y GANO LOS REYNOS DEL PIRV Y PVSO EN LA REAL CORONA DE CASTILLA" ("Here is the skull of the Marquis Don Francisco Pizarro who discovered and won Peru and placed it under the crown of Castille") [2,6]. The lettering was done hurriedly; Ludeña [2] noted that the artisan had to continue in a new tracing the word MARQV, and the final words REAL CORONA DE CASTILLA were inscribed in an additional line.

The Cathedral was badly damaged in the earthquake of 1746, one of many in Lima's history. By 1778, a virtually new cathedral was completed at the original site.

In 1891 on the 350th anniversary of Pizarro's death, a commission was appointed to examine a well-preserved body from the crypt under the altar of the cathedral that had been identified by church officials as the remains of Pizarro. The commission interpreted the loss of soft tissue in the face and neck to be indicators of wounds that hastened putrefaction [7]. Also, there seemed little reason to question the identity given the "unquestioned tradition extending over many years and by the constant care exercised during all this time by the Ecclesiastical Chapter" (Ref 7, p. 5), this despite the many earthquakes and the many transfers of the remains.

The mummy was placed in a glass, marble, and bronze sarcophagus in a chapel in the main portion of the cathedral in 1891. There it remained, where thousands of people have knelt to pray and still more thousands of tourists have peered through the glass with great curiosity.

On a Friday in 1977, four workmen cleaning the crypt beneath the altar, removed enough bricks in a niche that had been closed to see a top row of planks inside. On Saturday, they removed more bricks, and on a second surface of horizontal planks, they found a lead box with a wooden box along side. The top of the lead box bore the same inscription as mentioned in the 1661 account. One of the workers polished a corner of the box and, finding it was not silver, called it to the attention of the officials of the cathedral. Dr. Ludeña was consulted the following Monday.

Several authorities, U.S. and Peruvian, including the late renowned Peruvian physician and anthropologist, Dr. Pedro Weiss, examined the remains and agreed that some of the bones in the wooden box and the skull in the lead box were those of Pizarro. Nearly all scholars in Peru have accepted these findings (however, see San Cristobal and Guillén [8]).

In 1984, Drs. Benfer and Maples were invited to examine the remains. The examination of the remains from the crypt were conducted principally in Peru on two visits in March and April of 1984. In July of 1984, Benfer, Maples, and Dr. Goza examined the mummy, as well

as the bones from the crypt once again. On this July trip, Robert Leavy of the Florida Museum of Natural History made a mold of the skull. This excellent mold was used to make reproductions of the skull for additional study and display.

Examination of the Bones

Two wooden boxes were found. The first, larger box (Box A) contained the mixed remains of several skeletons: remains of at least two children, an elderly female, the skull and postcranial remains of an elderly male, and the postcranial skeleton of a second elderly male. We considered the possibility that the children might be relatives of Pizarro. According to the chronicler Agustín de Zárate, Pizarro's youngest son, Don Juan, died at four years, and his eldest son, Don Gonzalo, died when he was ten years old, although it is possible he might have been a few years younger. The remains of the older child were between eight and eleven years of age dentally [*9*] (eruption of permanent incisors and first molars, but not second molars). This child's postcranial skeleton appeared to be approximately six years of age based on diaphyseal lengths [*10*]. The remains of the younger child were approximately two years of age, dentally and skeletally.

The postcranial skeleton of the elderly male articulated with the skull in the lead box (C-1 cervical vertebra to occipital condyles). Inside also were the oxidized remains of a large sword (see Munda [*5*] for details), and the wooden box still had portions of a brown velvet covering and an outline of a cross of Santiago. The cross was no longer present, but the outline and nails for attachment to the box remained. Trace-element analysis of these nails at the Research Reactor of the University of Missouri revealed that they contained vanadium and were probably melted down broken armaments, not silver as had been suspected [*11*]. This box corresponds to the description of 1623 by the Mayor of Lima, who noted that the key had been lost, suggesting that the box was locked at that date. A second box (Box B), painted light green, with a red plastered surface on the inside, also contained human bones plus a lead box within which the skull had been kept. The lead box had oxidized areas that penetrated the base of the box. The skull had white deposits of lead oxide adhering to it with the same distribution as the oxidized areas of the box.

The skull from the lead box and the appropriate postcranial bones from the wooden box were from a white male (visual indications were confirmed by the Giles and Elliot [*12*] discriminant function formulae) approximately 65 to 69 in. (1.65 to 1.75 m) in height (as estimated by the Fully and Pineau [*13*] procedure). Pizarro's age at death was recorded variously, but chroniclers agree that he was between 63 and 65 years old at his death. The age at death as estimated from the skeleton and skull was at least 60 years (see Stout [*14*] for a histological age estimate).

The mandible had empty alveoli for all of the canines and premolars, but the alveoli for the incisors and molars had closed with considerable resorption of the alveolar process in those areas.

It appeared that all of the upper molars were lost during life. Postmortem damage and deterioration of the alveolar ridge of the maxilla made it difficult to confirm the antemortem loss of the upper central incisors (#8 and 9) and the two right premolars (#4 and 5).

Many of these bones showed damage. The lateral wall of the right orbit was broken away, but the edges were very white indicating recent damage, possibly from a molding attempt made before the 1984 examination (1977 photographs do not show this damage). This damage was easily distinguishable from the ample evidence of wounds, which were not recent.

Neck

There was an incised wound in the right body of the first cervical vertebra (Fig. 1) that was caused by a double-edged weapon entering the right anterolateral neck and proceeding

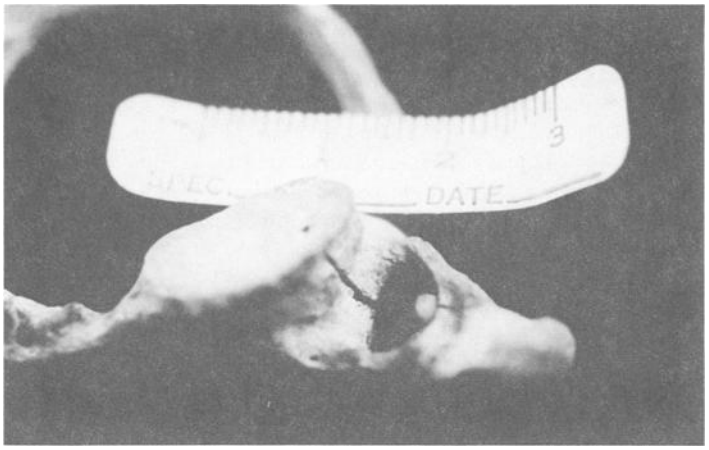

FIG. 1—*Incised wound in right transverse process of first cervical vertebra.*

slightly superiorly until the point hit the right side of the vertebra. The upper cutting edge grazed the transverse process of C-1 and the lower edge of the blade nicked the inferior articular facet of C-1 and the superior articular facet of C-2. This wound would have penetrated the right vertebral artery.

Another sword wound cut away the lateral half of the right inferior articular facet of C-2 and nicked the inferior surface of the right lamina (Fig 2). This wound also cut away the

FIG. 2—*Sword damage on right sides of second, third, and fourth cervical vertebrae.*

lateral extreme of the right superior facet of C-3, detached 3/4 of its right inferior articular facet, and cut away the right side of the tip of the spinous process. It also severed the extreme posterolateral edge of C-4 and left incised marks on the superior surfaces of the right lamina and base of the spinous process of C-4. An appreciation of the width of the blade of the weapon can be gained by estimating the distance between the incised marks on the inferior surface of the lamina of C-2 and the superior surfaces of the lamina and spinous process of C-4. The distance between the incised wounds on C-2 and C-4 indicated that the blade was more narrow posteriorly, that is, toward the point. Again, this wound came from the right anterolateral direction.

A third wound to the neck came from the same general direction as the first two neck wounds. A double-edged blade passed between C-4 and C-5 from their right anterolateral edges to the posterior midpoints of their bodies. It cut into the inferior 1/4 of the body of C-4 and the superior half of the body of C-5 (Fig. 3). It probably did not enter the vertebral canal, but the wedging apart of these two vertebrae probably produced some cord injury.

A fourth stab wound to the neck passed through the right vertebral foramen of C-5. There was no doubt that this injury would have severed the right vertebral artery. Again the orientation of the wound was the same as the other neck wounds.

Trunk

There was a cut along the right lateral side of the body of the T-6 vertebra. The undamaged transverse process clearly indicated that the wound came from the front of the body. The wound went superiorly at approximately a 15° angle. The entrance wound would have been located near the anterior midline.

A sword wound was located between the T-12 and L-1 vertebrae. It went across the adjacent surfaces of these vertebrae at an oblique angle from the right front of the body (Fig. 4). The incised wound was not deep in T-12, but was more than 1 cm into the body of L-1.

A 1-cm-deep defect on the ninth right rib approximately 2.2 cm from the costal end may have been caused by a stab wound. The rib cortex was friable and not in good condition, so definite interpretation of this damage was not possible.

The vertebral column showed the effects of age and a vigorous life in the number of

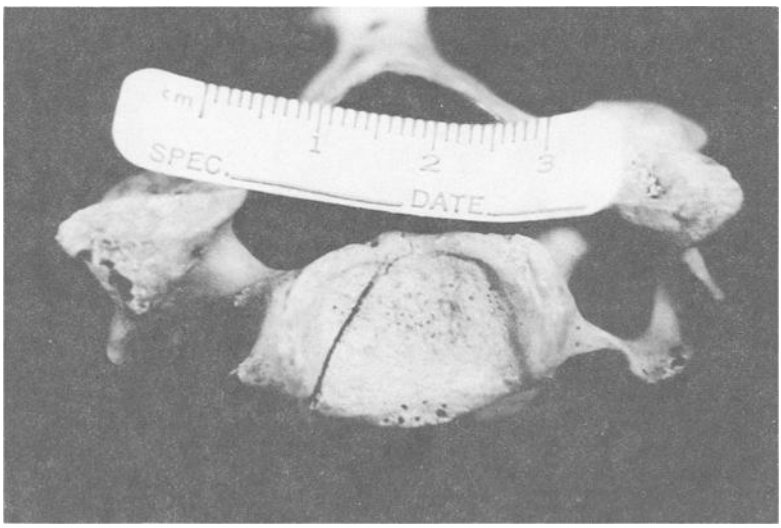

FIG. 3—*Superior surface of fifth cervical vertebra showing sword damage from right front of neck.*

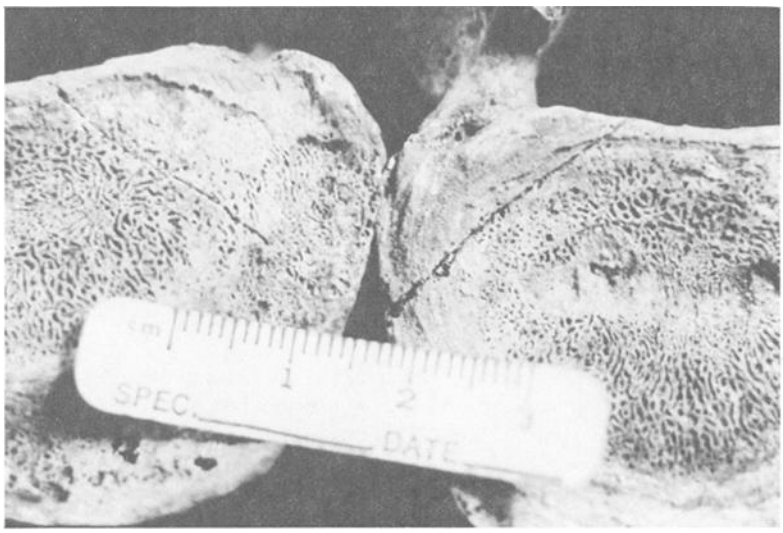

FIG. 4—*Incised damage to inferior surface of twelfth thoracic vertebra* (left) *and superior surface of first lumbar vertebra* (right).

Schmorl's herniations and the extent of osteophyte development. The eighth thoracic vertebra (T-8) also had pronounced anterior wedging.

Extremities

There was an oblique cut through the distal lateral portion of the right humerus (Fig. 5). It began distally, severing the lateral epicondyle from the humerus, but did not damage the capitulum. It continued proximally for approximately 3.3 cm along the lateral supracondy-

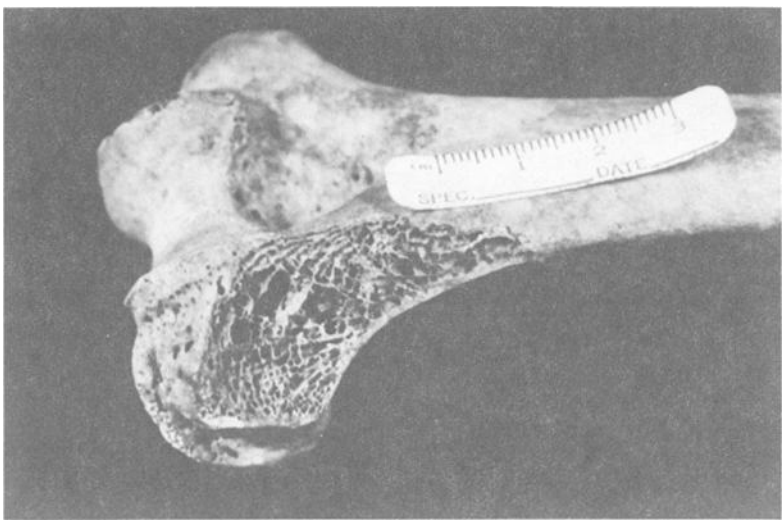

FIG. 5—*Sword wound that removed the lateral epicondyle of right humerus. Note that cut began inferiorly and ended near corner of scale. Most superior part of damage was a fracture as the epicondyle broke away from the humerus.*

lar ridge. The resulting fragment then broke from the humerus with a 1.1-cm-long fracture line. The fragment was not recovered. The posterior margin of the cut was even with the lateral edge of the posterior margin of the capitulum. The anterior edge of the cut was about 0.5 cm lateral to the lateral edge of the anterior margin of the capitulum. The cut portion was very clean, with no splintering of the cortex or the trabeculae.

There were two incised wounds on the radial border of the shaft of the left first metacarpal (Fig. 6). These were 1.5 and 3.1 cm, respectively, from the distal end of the bone.

The right fifth metacarpal was broken and the proximal half was not recovered. This fracture may have been perimortem.

The lateral surface of the right calcaneus had greenish stains. Since a single, long-pointed Moorish spur was buried with Pizarro (the other was put on by Martín Pizarro) [*4*], this stain may have resulted from copper in the spur.

The right ulna appeared to have a healed fracture at the distal one third shaft. The right ulna was shorter than the left ulna (absolutely as well as in relation to the relative lengths of the right and left radii) and slightly bowed. This was probably a healed childhood fracture.

Several phalanges had possible old healed fractures. One set of proximal and middle phalanges from the foot were fused.

Many of the joints showed a moderate amount of arthritic lipping. The general size of the bones, especially in the muscle attachment areas, suggested a well-developed and robust skeleton. These muscle attachment areas also suggested that this individual was right handed.

A hyperostosis on the medial surface of the left tibia may have been of infective origin (the possibility of syphilis must be considered), but more likely was from an old injury that caused periosteal response.

Mandible

A series of eleven finely incised marks appeared on the inferior border and medial surface of the right body of the mandible (Fig. 7). The orientation of these lines varied considerably. One of them appeared to be a small puncture wound where the extreme tip of a sharp double-edged weapon penetrated into the cortex at the base of the mandibular body. One of the linear marks lined up perfectly to the important wound that simultaneously damaged the fourth and fifth cervical vertebrae, thus associating the mandible with the postcranial remains.

The small incisions on the medial surface of the mandibular body all were directed superi-

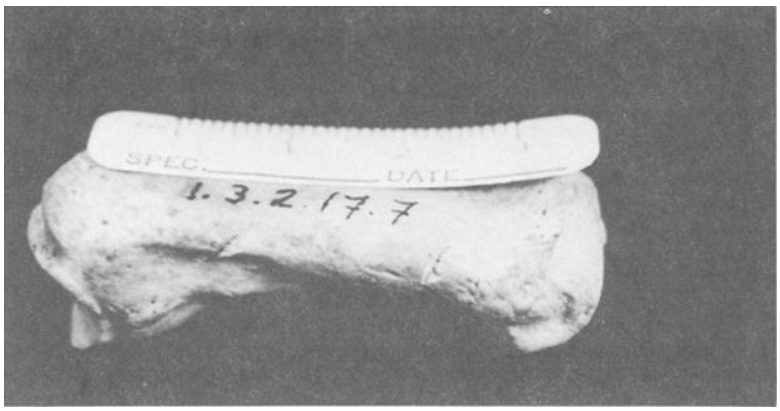

FIG. 6—*Two nicks on left first metacarpal.*

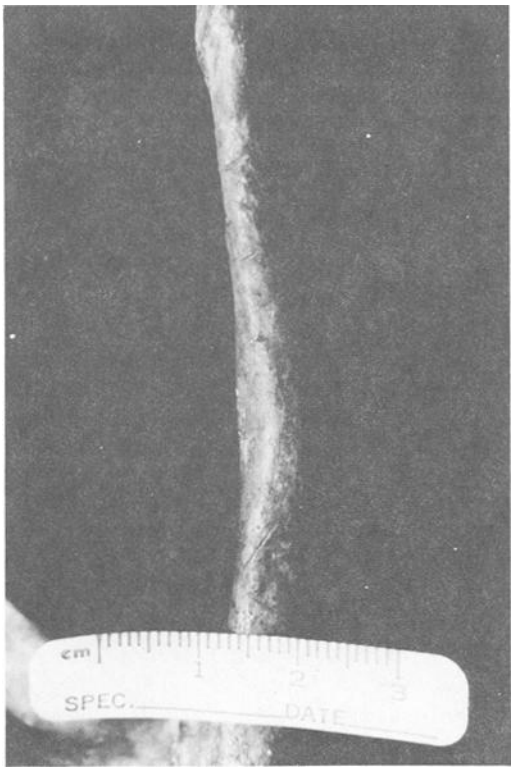

FIG. 7—*Numerous incised marks on inferior margin of right side of mandible.*

orly toward the skull base. These were probably associated with complimentary wounds to the skull base, to be discussed below.

A 0.75-cm-deep incised wound was present on the inferior edge of the right coronoid process. This may have been related to a fracture of the right zygomatic arch.

In addition to these marks on the mandible that were described above, there were nine other very light striations that were possibly incised marks.

Cranium

There was a clean fracture or cut through midpoint of the right zygomatic arch (see above). The anterior half of the zygomatic arch and associated portions of the zygomatic and maxillary bones were lost. The anterior margins of this defect had been recently damaged (see above), but the anterior margin of the remaining posterior part of the zygomatic arch was old and discolored by age, as seen in the other wounds.

The medial two thirds of the superior margin of the left orbit were broken away and lost. The left half of the frontal sinus was exposed anteriorly and a very small incised wound was present at the midline of the medial margin of the broken sinus. This wound lined up well with an incision on the inferior lateral margin of the damaged sinus. From there the weapon passed through the anterior part of the left orbit and exited through the lateral orbital wall, leaving a clear outline of the double-edged blade. The width of that part of the blade was 1.0 cm (cutting edge to cutting edge).

There was a stab wound beginning on the basilar part of the occipital bone at the medial margin of the right foramen lacerum and extending to the lateral margin of the foramen ovale (Fig. 8). The sharp edges of the weapon were 2.4 cm apart. The weapon moved superiorly and slightly anteriorly through the bone. The bone between the two foramina was broken away and lost. A second nick into the basilar part of the occipital bone, located slightly anterior to the first, indicated a second thrust of the weapon into the skull after slight twisting of the weapon.

There was 1.4-cm-wide stab wound into the sphenoid bone at the root of the left pterygoid process (Fig. 8). This may have gone about 1.5 cm deep superiorly. The weapon must have passed just anterior and parallel to the hyperextended cervical spine.

A 1.7-cm-wide, 0.12-cm-thick stab wound was found in the left greater wing of the sphenoid bone. The weapon grazed the anterior edge of the left lateral pterygoid plate before striking the wing of the sphenoid. It went about 1.1 cm into the sphenoid.

A slight defect was in the left anterosuperior point of the sphenoid bone. This may have been a stab wound, but, more likely, appeared to be postmortem damage.

The braincase was very carefully examined for fractures or other indications of trauma, but none were found other than the stab wounds in the skull base.

The high nasal bridge showed healed fractures of the nasal bones.

Examination of the Mummy

In July of 1984, a commission was established to reexamine the mummy certified as the remains of Pizarro by a similar commission in 1891. Four of the authors were part of this second commission and performed the actual examination of the mummy. The massive bronze lion on top of the sarcophagus was manually removed by workmen on 4 July 1984. The following day, the authors carefully removed the mummy and placed it on plywood covered by velvet from the sarcophagus. The examination was conducted in the library of the cathedral.

McGee [7] reported that the head of the mummy was attached to the trunk, but most of the soft tissue of the face, the anterior and lateral neck, upper left thorax and left arm, and the perineum, as well as the adjacent areas of the thighs was gone. All evidence of the geni-

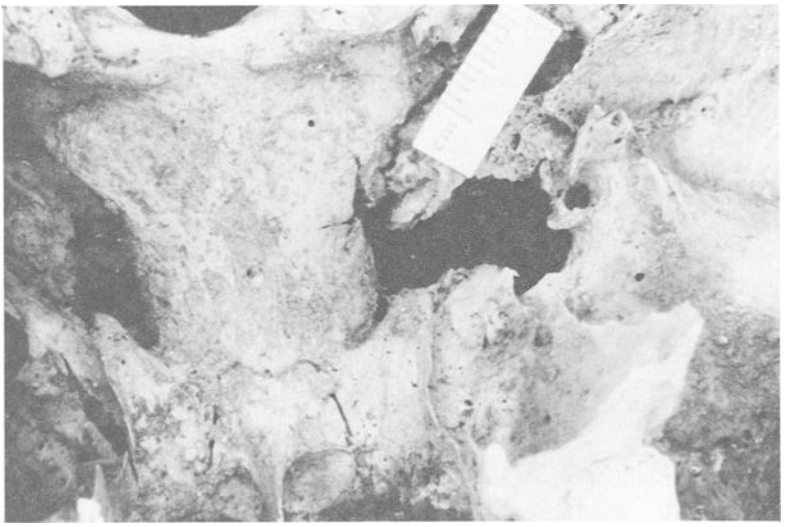

FIG. 8—*Damage to right side of base of skull.*

tals was missing. At the conclusion of that first study, the head had been separated from the rest of the body, the scalp and all remaining soft tissues of the head were removed, and many of the soft tissues of the neck were stripped. The condition of the mummy generally corresponded with that published description (Fig. 9) except somewhat more soft tissue loss may have occurred, especially in the legs. The skin was found to be slightly greasy to the touch and somewhat soft (about the consistency of damp leather). The head and neck were wired together as reported [7]. The shrivelled remains of the right eye were still in the orbit and the stump of the left optic nerve was present in the left orbit. The cotton placed in the cavities by the first commission was intact.

The mummy was photographed and measured. The stature, from the vertex of the bare skull to the skin covered heel, was 165.5 cm. It appeared to be male of advanced years. The skeletal morphology, especially in the areas of muscle attachment, was not robust, but rather gracile. The skin of the legs showed textile imprints from stockings or other tight garments that were no longer present. Indentations of restrictive cords were present on the right thigh and ankle (Fig. 10). The articular facets (left and right) of C-3 through C-6 were fused during life. Because of this fusion and the remaining intact ligaments, the head and neck had no naturally remaining attachments only between the head and C-1, between C-2 and C-3, and between C-6 and C-7.

The skin of the dorsal surface of the body showed the imprint of the closely woven textile pattern of the velvet in the sarcophagus.

All remaining areas of skin were minutely examined for evidence of wounds. There were none.

FIG. 9—*Mummy showing remaining skin on chest, cotton placed in the thorax during 1891 examination and wire holding skull on vertebral column.*

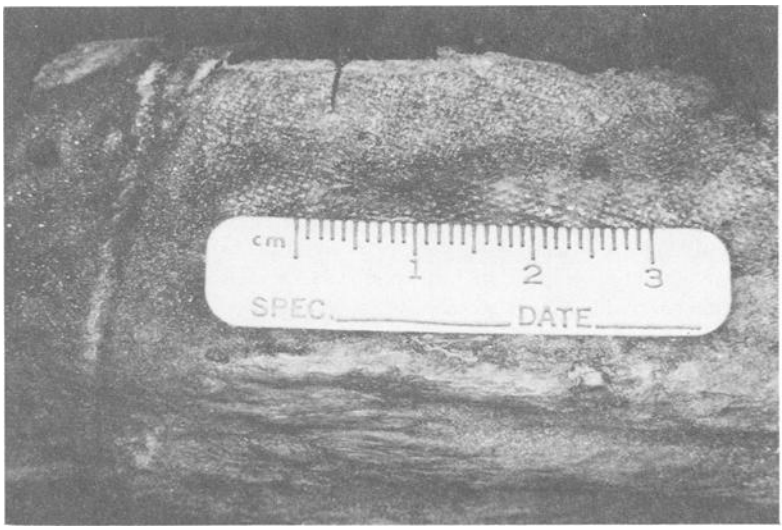

FIG. 10—*Skin from leg of mummy showing imprint of a cord around the legs and of a textile. Neither cords nor textiles were present when the authors examined the mummy in 1984.*

All exposed bones, and all bones that could be seen through apertures in the skin, were examined with various magnifying devices. No evidence of unhealed fractures, chips, scratches, or incised marks could be seen. The bone was in excellent condition and any damage would have been quite evident. The cervical vertebrae and occipital condyles were carefully examined for evidence of incised marks related to decapitation, but none were found.

The occipital condyles articulated very well with the superior articular facets of C-1.

The nasal bones suggested healed fractures, but no other evidence of healed fractures or other antemortem trauma or pathology was found.

Sculpturing a Face on the Skull

A cast of the skull, prepared by Maples in April of 1984, was sent to Betty Pat Gatliff, who sculpted a face using her well-established technique [*15, 16*]. Several visages were ultimately configured with various hair and beard styles, without any hair (head or face), and with a helmet. Some of these results are seen in Figs. 11 and 12. It can be seen that the sculpture depicts a heavy-faced man more resembling peasant stock than the effeminate, narrow-faced nobles shown in the contemporary art of Spain.

In Trujillo, Spain, the place of Pizarro's birth, casts of the skull and facial sculpture, the latter in bronze were presented in 1986 to the museum in the restored convent, Convent of La Coria, where Pizarro's mother may have worked. This sculpture earned Gatliff the first-place award for three-dimensional media for 1988 from the Association of Medical Illustrators.

Conclusions

All evidence supported the association of the skull from the lead box with the postcranial remains of the elderly man found in the wooden box. The articulation of C-1 with the occipital condyles firmly associate the skull with the vertebrae which had so much incised trauma. The correlation of some of the wounds in the vertebrae and the skull base with the inferior mandibular margin also strongly supports the association of these particular cranial and postcranial remains.

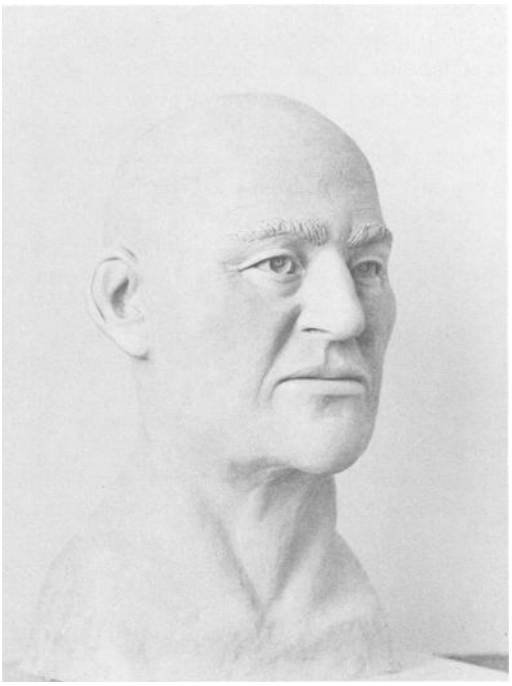

FIG. 11—*Sculpture of facial features prepared by Gatliff on cast of Pizarro's skull. No head hair or beard was used in this version.*

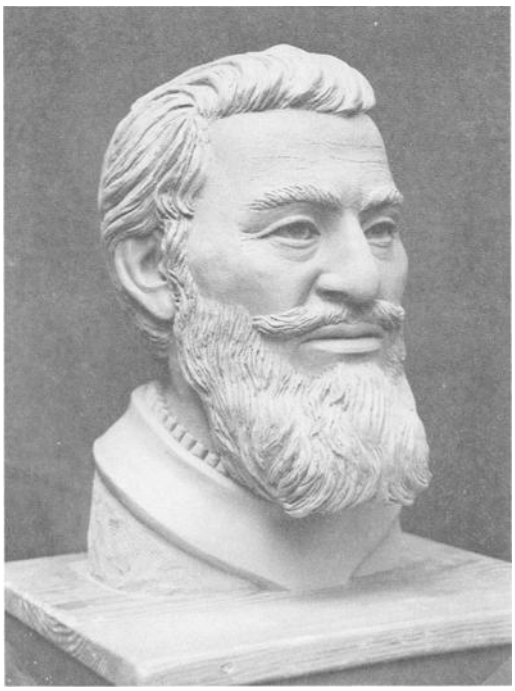

FIG. 12—*Sculpture of facial features prepared by Gatliff on cast of Pizarro's skull. Head hair, moustache, and a full beard were used in this version.*

The incised wounds to the bones from the crypt were consistent with the historical account of the death of Pizarro. All of the wounds to the face, neck, and trunk came from the right oblique front. A right-handed swordsman with the right arm extended would present that aspect of the body to the opponent. If Pizarro was felled by a wound to the throat as related in the accounts, it most likely would have come from that direction (the right front). Probably any of the throat wounds could have brought him down. The wounds to the skull base almost certainly came after the victim was disabled. Probably he was on the floor in a supine position. None of the wounds came from the back.

The many wounds on the lower margin of the mandible and the various directions of these marks suggest that one or more sharp weapons moved repeatedly on the throat area under the jawline.

The wound to the right humerus was made with a sharp and heavy blade. This wound would have disabled his sword arm. Similarly, the fractured metacarpal may have been the result of blunt trauma to remove a weapon from his hand.

The nicks on the left first metacarpal were on the part of the hand that would have been on the most exposed surface of the hand in the back of the shield.

The great number of wounds and the damage under the mandible and in the skull base to dispatch an enemy are consistent with an assassination by multiple assailants armed with thin, double-edged weapons. Munda [5] shows actual weapons juxtaposed with some of the cuts described above. After a bitter fight, many or all of the assassins plunged their weapons into the dead or dying man. The skeleton of Pizarro brought to mind scenes from Shakespeare's *Julius Caesar* or Christie's *Murder on the Orient Express*.

It should be remembered that not all stab wounds which penetrate the flesh will strike a bone. In a recent case investigated by one of the authors (Maples), 24 stab wounds to the thorax (by penetration through the 3 layers of clothing on the upper body and by count according to the assailant) left a total of 8 incised wounds on 7 bones. These wounds came from a knife rather than the long blades that were mostly used on Pizarro, but this should give some reference for comparison. In the case of Pizarro (see Table 1), there were at least 11 stab wounds on the bones (possibly as many as 14), as many as 14 cuts on the bones, and 1 possibly blunt-force fracture. This was the result of extreme homicidal violence.

TABLE 1—*Summary of wounds to the skeletal remains.*

Description of Wounds	Stab	Cut	Blunt
Right transverse process of C-1	1		
Right processes of C-2/4	1		
Right anterior oblique bodies of C-4/5	1		
Right transverse process of C-5	1		
Right side of the body of T-6	1		
Bodies of T-12/L-1	1		
Possible incised wound in ninth right rib	1[a]		
Lateral epicondyle of right humerus cut away		1	
Two nicks on the left first metacarpal		2	
Fractured right fifth metacarpal			1[a]
Incised wounds on right inferior margin of mandible		11	
Right zygomatic arch and coronoid process	1		
Left frontal sinus, through the eye and the lateral wall of the left orbit	1		
Right foramen lacerum and ovale	1[b]		
Sphenoid bone at the root of the pterygoid process	1		
Wing of the left sphenoid bone	1		

[a]Probable.

[b]The weapon was thrust into the base of the brain twice, but probably had a single skin penetration.

The mummy, on the other hand, died without any evidence of incised wounds on the remaining skin or intact skeleton.

The skeleton from the crypt belonged to a robust man who led a hard life. Pizarro, the old warrior, who carried his men when they could go no farther, who survived fierce battles and remarkable hardships to conquer the 3000-mile (480-km) long kingdom of the Incas, would have had a back such as seen here.

The mummy, delicate and undamaged by marks of battle (other than a healed fractured nose), was more likely the body of a bureaucrat or an ecclesiastic than that of a conquistador, although McGee marked him as having a cranium that was "that of a typical criminal of to-day" [6], an unfortunate characterization of a man of God.

The identification of the skeletonized remains as Francisco Pizarro, and the rejection of the mummy for that distinction were the conclusions of this investigation.

When the 450th anniversary of the founding of Lima was celebrated in January of 1985, the authors were invited to the celebrations as special guests. To see the bones that were found in the crypt in 1977 now resting in the glass and marble sarcophagus with the massive bronze lion on top, and to see the mummy that had been honored for almost a century now resting on the sheet of plywood supported by two sawhorses in the crypt, raised the sobering thought that fame is fleeting, not only for the living, but also for the dead.

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