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USAMRIID PROJECT DANCER

AUTOPSY REPORT

Subject: Anomalous Entity #E1
Date of Death: 9/30/1999
Reporting Pathologist: Dr A Manara

Circumstances:

Unknown creature believed to be responsible for a number of deaths in the Long Island area. Apprehended by agents of this office through the application of heavy firepower (see debrief document attached).

External Examination:

The body of an unidentified bipedal organism, possessing a pair of wings in addition to arms and legs. Eight bullet holes are identified in the ventral surface of the torso and corresponding exit wounds on the dorsal surface, all exuding a thick yellow fluid also spattered across the entire ventral surface. The creature has a tough chitinous integument of a uniformly greyish colour. The creature measures 221cm in height, and weighs 107 kg.

The head is elongated, with a long snout and counterbalancing cranium. The mouth contains twenty-eight isodont teeth. The exposed portions of the teeth are 3cm in length and with sharp, slightly serrated rear and forward edges. Spots of brown blood and organic tissue are identified on the teeth and around the jaws. There are no lips. The lower jaw possesses two chitinous spurs 1cm in length near the apex of the inferior surface. The chitinous integument extends into the upper and lower surfaces of the mouth. There is no tongue. A large, firm protuberance is located at each side of the mouth, behind the angle of the gape. These are covered with a flexible mucosa, notably softer than the integument.

Two nostrils are identified, surrounded by apparent muscular sphincters. The eyes are smooth and crystalline, with a pearly bluish-grey colouration. There are no eyelids. Posteriorly and superiorly to the eyes are a pair of elongate antenniform structures, each 27cm in length. These are 8mm in diameter along most of their length, but slightly enlarged distally, where a row of six small pits, each 3mm m.d., is located on the ventral surface.

No ears are identified, nor are there any other orifices on the head. A sparse covering of black hairs is located over the posterior fifth of the head, and extends down the posterior surface of the neck to about a half of the way down the back of the thorax.

The ventral forelimbs are thin but muscular. They are articulated slightly ventrally from the superior surface of the thorax, so that they hang down in front of the body. The anterior surface of the lower half of the distal portion of the limb bears three hard, rounded, chitinous protuberances. The manus bears four digits, each articulated at the base and with a single joint approximately one quarter of the way along. Distally to the joint, each digit consists of a sharp recurved claw. Three of the claws are 8cm in length, while the most medial digit bears a 5cm claw. None of the digits are opposable. Traces of brown blood are identified on some of the claws.

The lower limbs are also articulated slightly to the ventral surface of the abdomen and therefore project forwards. The pes bears three digits anteriorly, and one opposable digit posteriorly. The anterior digits have two joints beyond the articulation and are 20cm in length. The posterior digit is 9cm in length and has only a single joint beyond the articulation. All of the digits terminate in sharp, recurved claws, each 1.5cm in length.

The dorsal forelimbs are articulated at the same level of the thorax as their ventral counterparts. The main joint within the limbs is stiff and immobile. There is some limited mobility of the carpal joint, which bears four digits. Three of these digits are elongated and bear no flexible joints; a pterygial membrane stretches between these digits and between the digits and the rear of the thorax, so as to form a wing structure. The fourth digit is rudimentary, and consists only of a short recurved, immobile, claw. The

pterygium has a similar texture to the integument, but is much more flexible, and is semi-translucent, revealing small blood vessels within.

The thorax is tapered, with powerful muscles discernable beneath the integument in the region of the shoulders. There are no nipples, natural orifices or other distinct structures on the thorax. The upper part of the abdomen is extremely narrow, only half the diameter of the thorax or lower abdomen, so that the torso is distinctly divided into two segments. The hind limbs articulate just below this stricture. The lower abdomen is covered by seven segmental sheets of especially tough and rigid chitin. A small orifice with a muscular sphincter is identified on the upper ventral surface of the lower abdomen. The apex of the lower abdomen consists of a mirror-smooth hemispherical depression 2cm in diameter, in the centre of which there is a small conical papilla.

Radiographic examination: The integument of the creature is somewhat radio-opaque, making radiographic examination of the internal structure difficult. An internal skeletal structure is, however, visible within the body. The bones of the skull appear complete, so that each limb contains a single bone in each segment and an additional single bone at the base of the digits. Complex girdles of bones are identified at the levels of articulation of the limbs. A series of seven ribs surrounds the thorax, with a bony structure similar to a vertebral column running down the ventral midline. A dorsal vertebral column runs from the base of the skull through the thorax and upper abdomen. A regular radio-opaque mass is observed occupying the inferior half of the lower abdomen, divided into four segments corresponding to the external segmentation of this part of the body and enclosing the apical pit.

Internal Examination:

Cardiovascular system: Apparent blood vessels are located throughout the body. These contain variable amounts of a thick yellowish fluid, which is also found within the general body cavity. The largest vessel is connected to the inferior surface of a muscular organ in the approximate centre of the thorax, presumed to be the heart. Numerous finer vessels connect to the upper surface of this heart, all of which originate in the presumed lung (see below). The heart contains two chambers, one superior and one inferior, connected by a single central valve. The heart weighs 204g.

Respiratory system: A tracheal tube runs from the nasal cavities through the neck. Opening the tube reveals a series of muscular valves dividing it into four segments. The tube enters inferiorly into a large spongy organ, where it divides into many smaller vessels. This organ, presumed to be a lung, occupies almost the entire upper half of the thorax, with the heart lying cushioned against its inferior surface. A muscular diaphragm lies beneath the lung, becoming fibrous centrally, above the heart. The lung has been penetrated by four bullets. It weighs 947g.

Digestive system: The mouth opens into an oesophagus that passes through the neck and upper thorax ventrally to the trachea and lung. A taut stomach occupies the ventral portion of the lower thorax. Opening the stomach reveals a considerable quantity of altered blood. A narrow intestine runs from the stomach through the narrow upper abdomen and forms a coiled mass in the superior portion of the lower abdomen. The anus is located at the ventral abdominal orifice. Two bullet wounds penetrate the intestines. A flat, lobulated greenish organ is located just below the junction of the upper and lower abdomen, and is attached to the distal portion of the intestine via a narrow duct. This organ weighs 135g.

Lymphatic system: Not positively identified.

Central nervous system: The cranium contains a pale rugose organ, presumed to be the brain, weighing 983g. Nerve-like fibres run from the brain to the eyes, antennae and nostrils. A much larger presumed nerve cord runs from the base of the brain into the dorsal vertebral column, with numerous nerves branching off to the limbs and organs of the body.

Genito-urinary system: Not positively identified.

Endocrine system: Not positively identified.

Other internal organs: The lower thorax, upper and mid abdomen form a single body cavity, lined by mesothelium. A pale, collapsed, sac like organ is located dorso-superiorly to the lung, in close proximity to the trachea and vertebral column. An irregular fatty organ occupies the lower thorax, dorsal to the stomach. This organ weighs 5.2 kg, and is penetrated by a bullet wound. A reddish spherical organ 46g in weight is attached to the fatty organ by a major blood vessel. A horseshoe-shaped greyish-yellow organ lies inferiorly to the stomach, and weighs 20g. Two pale yellowish organs are located on either side of the upper abdomen, attached to the mesothelial lining, and together weigh 21g. Two bluish-grey egg-shaped organs are located in the mid-abdomen, inferiorly to the intestinal coils, and together weigh 30g.

A large organ, previously observed on radiography, occupies the inferior portion of the lower abdomen. The surface of the organ is smooth and white, with a copious supply of yellow blood vessels. The wall of the organ is highly calcified, and has been penetrated by a single bullet wound. Sectioning of the organ with bone saws reveals that the superior three segments of the organ each contain a toroid gas-filled space surrounding a series of rod-like structures embedded in a spongy substance and which connect all three segments and penetrate the fourth, smallest segment. The remainder of the fourth segment contains a series of calcified plates with nodular surfaces.

Histopathological Examination

The integument consists of a tough chitinous cuticle up to 5 mm thick overlying a columnar epithelium. No glands are identified within the integument, but a few fine bristles project from modified cells in the epithelium, and are presumed to be sensory in function. Beneath the epithelium lies a layer of connective tissue consisting of collagen fibres, adipose cells and other cells of unidentified function. The connective tissue also contains numerous capillaries and nerve fibres.

The muscular tissue appears similar to that in known vertebrates. The heart consists of muscular fibres indistinguishable from those of the skeletal muscles. There is no pericardium. The blood contains numerous enucleate cells and a smaller number of ovoid nucleate cells.

The bones are largely acellular, apart from a network of blood vessels and a central hollow core consisting largely of adipose tissue. The blood vessels in the bones have occasional irregular cells on their outer surfaces, which may perform a role in the maintenance of the calcified matrix.

The lung consists of a complex series of interconnected air spaces lined by a simple squamous epithelium and surrounding blood vessels, nerves and bronchi. The lungs lie within a pleural cavity lined by cuboidal epithelium.

The firm protuberances within the mouth consist of muscular tissue. The gut is lined by an epithelial mucosa, an inner circular and outer longitudinal layer of muscle fibres, a thin outer sheet of adipose tissue and a serosal lining of cuboidal epithelium. The mucosa of the oesophagus, stomach and rectum consists of cuboidal epithelium, which merges into a stratified squamous epithelium at the pharyngeal and anal margins before reaching the integument. The intestinal mucosa is rugose and lined by columnar cells with multiple cytoplasmic papillae on the luminal surface. This epithelium overlies a collagenous submucosa containing occasional glandular structures.

The greenish organ connected to the digestive system consists of multiple lobules; each containing coiled tubes lined by cuboidal epithelium. The tubes are separated by a connective tissue stroma containing blood vessels and large irregular cells of unknown function. A network of larger vessels connects the lobules to the efferent duct.

The brain is surrounded by a sheath of adipose tissue enveloped in a meshwork of collagenous fibres presumed to be analogous to the meninges. The brain contains complex nerve cells, similar to those in vertebrate brains.

The mucosa of the sac-like organ consists of transitional epithelium, and is surrounded by a heavily innervated submucosa, which also contains multiple glandular structures with ducts opening into the lumen of the organ. It is contained within its own mesothelial lining.

The fatty organ is essentially homogenous in structure and consists of a mixture of adipose cells and regular spherical cells of unknown function. There are numerous blood vessels within the organ.

The reddish spherical organ consists of a matrix of cuboidal cells surrounding microscopic fluid-filled cavities and a network of fine capillaries. These cells contain what appear to be secretory granules. Microscopic clusters of smaller cells of unknown function are found embedded within the organ.

The horseshoe-shaped organ consists of multiple different types of unidentified cell forming sheets surrounding flattened, blood filled spaces.

The paired yellowish organs consist of regularly shaped cells enclosed in a fibrous capsule.

The paired bluish organs are divided by microscopic fibrous septae and consist of numerous spindle-shaped cells mixed with a smaller number of spherical and dendritic cells.

No histological sections could be prepared from the large apical organ, but the presence of many heavy metals was detected, and the organ appears to be largely acellular on superficial microscopic examination.

There are no apparent ultrastructural abnormalities within the cells examined. The organism possesses 18 pairs of chromosomes, none of which are obviously sex chromosomes. Analysis of the blood reveals the presence of a complex, yellow-coloured porphyrin molecule with some superficial resemblance to haemoglobin, and containing magnesium instead of iron.

Conclusions

Although this organism has a superficial resemblance to a terrestrial vertebrate, close examination reveals it to have no relationship with any known terrestrial organism. The possession of six limbs, the shape of the torso and the possession of antennae rule out any obvious vertebrate connection, which is further confirmed by the bizarre arrangement and nature of the internal organs. It is therefore concluded that such features as the general form of the limbs and the arrangement of the eyes, nose and mouth are the result of parallel evolution in an unknown, but essentially Earth-like, environment.

The size of the organism relative to its wings would suggest that it would be a poor flyer at terrestrial atmospheric densities. Its large size and powerful musculature would suggest significant physical strength. These factors taken together would imply that it may have evolved in a high gravity environment with a dense atmosphere. Reports indicate, however, that it is apparently comfortable under terrestrial conditions.

The size and complexity of the brain suggest that the creature may be very cunning, but it is unlikely to possess true sentience or human levels of intelligence.

The simplicity of the digestive tract suggests that the creature feeds primarily on fluids or soft foods, and that the teeth likely serve a primarily defensive function. The contents of the stomach and the report submitted by agents of this office suggest that vertebrate blood, including that of humans, is nutritious to the organism. Blood drinking may therefore be its primary means of obtaining nutrition in its native habitat.

The body tissues generally contain a significant number of adipose cells, which may suggest a frigid native environment. The multiple valves in the trachea may enable the creature to hold its breath for extended periods of time, although the lack of obvious amphibious adaptations may count against this theory.

The structure of the large greenish organ suggests that it is probably excretory in function. The absence of any other obvious excretory organs further suggests that the organ is analogous to a kidney, and that urine or other waste products are emptied directly into the hindgut and expelled with the faeces.

The function of the other unidentified organs is less apparent, although the size of the fatty organ might suggest that it has a metabolic function similar to the vertebrate liver. Many of the smaller organs are probably endocrine in function, but the function of the large apical organ is entirely obscure at this time. No obvious reproductive organs were identified in the organism, so that its life cycle remains unknown.

At an ultrastructural level, however, the organism appears very similar to terrestrial forms. The cells possess nuclei, mitochondria and other well known organelles, while non-cellular substances found within the body include collagen, myelin, etc. It is unclear what significance this finding may have.

Death was due to multiple bullet wounds and loss of blood. The tough integument and large size of the organism probably make it more resilient to injury than a typical human, but modern military firearms are apparently quite effective against it.

Ia Trauma and blood loss
Ib Firearm injuries
II Unidentified organism, probably of extraterrestrial origin

A Manara

Supervising Officer: Lt-Col. R Smith

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