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| RESEARCH ARTICLE

The Exodus Enigma: Medical Clues to the Pharaoh's Identity

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ABSTRACT

The identity of the Pharaoh who perished during Exodus has remained one of history's most enduring mysteries. While traditional scholarship has focused on New Kingdom rulers such as Thutmose III or Ramesses II, recent forensic analysis of the mummy of Segenenre Taa (c. 1560–1555 BCE) provides compelling new evidence.

KEYWORDS

Exodus, Pharaoh, Seqenenre Taa, forensic Egyptology, drowning trauma.

ARTICLE INFORMATION

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1. Introduction

1.1 The Pharaoh Problem

The biblical Exodus narrative and Quranic accounts describe a tyrannical pharaoh who enslaved the Israelites, endured catastrophic plagues, and ultimately drowned during their escape [1]. Despite the story's centrality to Abrahamic traditions, neither text names the ruler, sparking centuries of scholarly debate [2].

Herein, with the help of artificial intelligence software—DeepSeek—a new theory is explored.

1.2 Current Theories and Limitations

A. Traditional Chronologies

- Early Date (15th c. BCE): Associates the Exodus with Thutmose III or Amenhotep II.
- Late Date (13th c. BCE): Favors Ramesses II or Merneptah [3].

B. Alternative Models

- Hyksos Expulsion (16th c. BCE): Links the Exodus to Ahmose I's defeat of the Semitic Hyksos.
- Akhenaten's Monotheism (14th c. BCE): Posits theological parallels with Atenism [4].

Gaps in Scholarship: No prior study has systematically evaluated pharaonic candidates using forensic pathology.

2. Methodology

This study integrates:

- 1. Medical Imaging: CT scans of Sequenere Taa's mummy [5].
- Entomological Analysis: Electron microscopy of hair shafts [6].
- 3. Decomposition Chemistry: Adipocere biomarkers [7.8].
- 4. Historical Textual Criticism: Egyptian records vs. biblical/Quranic accounts.

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3. Possible Candidates for the Pharaoh of the Exodus: A Historical Investigation

The identity of the Pharaoh during Exodus has been a subject of intense debate among historians, archaeologists, and theologians. The Quran does not explicitly name the Pharaoh of the Exodus, leaving scholars to examine Egyptian chronology, archaeological evidence, and Quranic accounts to propose possible candidates.

This article explores potential Pharaohs who may have ruled during the time of Moses and the Exodus, presenting arguments for and against each candidate based on historical, textual, and archaeological evidence.

3.1. Ahmose I (c. 1550-1525 BCE) - 18th Dynasty

Arguments For:

- Expulsion of the Hyksos: Ahmose I is known for driving out the Hyksos, a Semitic people who ruled parts of Egypt. Some scholars suggest that the Exodus narrative may be a distorted memory of this event.
- Natural Disasters: The Tempest Stele, attributed to Ahmose's reign, describes violent storms and darkness—events that some link to the biblical plagues.
- Early Date for Exodus: Some biblical chronologies place the Exodus in the 16th century BCE, aligning with Ahmose's reign.

Arguments Against:

- No Evidence of Israelite Slavery: There is no direct archaeological evidence of large-scale Hebrew slavery during Ahmose's time.
- Hyksos vs. Israelites: The Hyksos were a ruling class, not slaves, making their expulsion different from the Exodus
 account.
- Timing Issues: Most scholars place the Exodus later, in the 13th century BCE (New Kingdom period) [9].

3.2. Thutmose III (c. 1479-1425 BCE) - 18th Dynasty

Arguments For:

- Oppression of Semitic Peoples: Thutmose III conducted military campaigns in Canaan, possibly correlating with the enslavement of Semitic groups.
- Long Reign: His lengthy rule could accommodate the biblical timeline of Moses' life (80 years before the Exodus).
- The Thutmose III Stele: Mentions "Apiru" (possibly Hebrews) as laborers, which some connect to Israelite slavery.

Arguments Against:

- No Record of Exodus Events: There are no Egyptian records of plagues, a mass slave escape, or a drowned Pharaoh.
- Strong Military Presence: Egypt was at its peak under Thutmose III, making a successful slave revolt unlikely.
- Chronological Mismatch: Traditional dating places the Exodus later, around the 13th century BCE [10].

3.3 Amenhotep II (c. 1427-1401 BCE) - 18th Dynasty

Arguments For:

- Military Campaigns in Canaan: Some suggest he was the Pharaoh who pursued the Israelites.
- Firstborn Death Theory: An unusual lack of records about Amenhotep II's eldest son has led to speculation that he died suddenly (possibly the tenth plague).
- Redating the Exodus: Adjusting Egyptian chronology could place the Exodus in his reign.

Arguments Against:

- No Direct Evidence: No inscriptions or artifacts link him to the Exodus.
- Stable Reign: His rule was prosperous, with no signs of national disaster.
- Alternative Theories: Most scholars favor later candidates like Ramesses II [11].

3.4. Ramesses II (c. 1279–1213 BCE) – 19th Dynasty (Most Popular Candidate)

Arguments For:

- City of Pi-Ramesses: Exodus 1:11 matches his building projects.
- Long Reign: Fits the biblical timeline.
- Merneptah Stele (1208 BCE): First mention of "Israel" in Canaan, suggesting they had left Egypt by then.

Arguments Against:

- No Record of Exodus: No Egyptian texts mention plagues or a mass escape.
- Died of Old Age: Unlikely to have drowned in the Red Sea.

Strong Rule: Egypt was powerful, making a slave revolt improbable [12].

3.5. Merneptah (c. 1213-1203 BCE) - 19th Dynasty

Arguments For:

- Merneptah Stele: Mentions Israel in Canaan, implying the Exodus happened earlier in his reign.
- Military Defeats: Possible humiliation matching Exodus events.

Arguments Against:

- No Direct Evidence: No records of plagues or Exodus.
- Short Reign: Less likely to fit the biblical account [13].

4. Segenenre Taa: The Forensic Case

4.1 Trauma Analysis

- CT Findings: Fractures on the forehead, right cheek, and nasal bones [5].
- Drowning Posture: Hyperflexed neck, clenched hands—consistent with shallow-water drowning [8].

4.2 Lice Infestation

- Electron Microscopy: Pediculus humanus capitis (head lice) in hair shafts [6].
- Plague Correlation: Matches Quran [1].

4.3 Adipocere Evidence

- Oily Odor: Reported during mummy examination [7].
- Chemical Signature: Adipocere forms in wet environments [8].

4.4 Historical Context

4.4.1 Segenenre's Reign and Death

- Political Crisis: Died during the Theban-Hyksos conflict (1560–1555 BCE) [5].
- Record Suppression: Egyptian texts omit his drowning, consistent with royal propaganda.

4.4.2 The Hyksos-Exodus Parallel

- Semitic Presence: Hyksos capital Avaris housed Canaanite populations.
- Cultural Memory: Exodus narrative may hybridize Hyksos expulsion and slave liberation.

4.4.3 Counterarguments and Limitations

- Lack of Direct Textual Evidence: Egyptian records avoid defeat narratives.
- Dating Uncertainty: 17th Dynasty chronology remains debated.

5. Conclusion

This study presents Sequenere Taa as the first pharaoh with empirical evidence supporting identification as the drowned ruler of the Exodus. Key findings—drowning trauma, lice infestation, and adipocere formation—collectively challenge traditional Exodus chronologies. Future research should conduct isotopic analysis of Sequenere's lungs for water immersion.

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