Qeios

Peer Review

Review of: "Syphilis: A Review of the Controversies on Its Origins and Research of Its Arrival in Quebec, Canada"

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1) Title / Abstract

- **Questions**

What is your operational definition of “first historical evidence” (first written mention? first outbreak? first credible clinical description with genital + systemic features? first source judged reliable)?

2) Introduction

- **Major concerns**

The introduction would benefit from explicitly naming the **main competing hypotheses** (and what type of evidence adjudicates them), rather than moving quickly in one direction.

- **Questions**

Are you positioning this as (a) a narrative review, (b) a structured review, or (c) a historical-archival synthesis? Right now, it reads like **all three**.

- **Suggestions**

Add a short paragraph: “Competing hypotheses + what would count as decisive evidence (paleopathology criteria, aDNA, documentary records).”

3) Methods

Major Concerns

- **Duplicated inclusion criteria text** (same sentence repeated) and unclear flow.

doi.org/10.32388/X74M3V

Missing key reproducibility details: **search date**, exact query strings, number of records, and whether you did **any quality/risk-of-bias appraisal**, which is crucial when weighing archaeological/paleopathological claims.

Questions

1. When exactly were PubMed/Scopus searched (month/year)?
2. How many articles were retrieved, screened, included? (even a simple flow count is enough)
3. Did you apply any standard criteria to classify skeletal evidence as "consistent with treponemal disease" vs "non-specific periostitis"?

Suggestions

1. Add: (1) search date, (2) full search strings (appendix), (3) PRISMA-style flow, (4) a short quality appraisal approach (even if qualitative).
2. Clean the duplicated inclusion-criteria paragraph.

4) Results & Discussion (Origins controversy / paleopathology)

4.1 Treponematoses + evolutionary narrative

- **Major concerns**

The "yaws → bejel → syphilis" pathway is presented as a fairly linear progression; it needs more careful phrasing as a **hypothesis**, not a settled pathway.

- **Questions**

Which genetic/phylogenetic studies most strongly support this specific directional narrative (and are they cited directly, rather than via secondary sources)?

- **Suggestions**

Add one paragraph explicitly stating uncertainty and alternative evolutionary scenarios; avoid implying inevitability.

4.2 "No clear evidence" in pre-Columbian Europe

- **Major concerns**

The manuscript says there was “no clear evidence” pre-Columbus but then cites a **counterexample** (7th–8th century treponemal finding near Marseille) that challenges a strict “New World origin.”

This section needs clearer balancing: what does this Old World finding imply (or not imply) about venereal syphilis vs. the treponemal complex generally?

- **Questions**

How do you interpret the Marseille case relative to venereal syphilis specifically?

- **Suggestions**

Add a short “How this finding affects the controversy” paragraph.

4.3 Skeletal evidence section

- **Major concerns**

“Periosteal reactions” and “osteitis/periostitis” are described, but these are often **non-specific** without a structured differential (and the manuscript acknowledges attribution difficulty).

The “6%–14%” figure is presented without context (what dataset? what diagnostic thresholds?).

- **Questions**

Which diagnostic criteria were used in the papers underlying the 6–14% estimate? Were lesions considered “treponemal disease” broadly or “venereal syphilis” specifically?

- **Suggestions**

Add a brief table: site / date / criteria used / conclusion / limitations.

5) “Syphilis today” (modern epidemiology + Indigenous health)

- **Major concerns**

This section becomes broad (Australia + Tuskegee + US congenital rates), which can feel disconnected from the core Quebec historical question unless explicitly linked.

- **Questions**

What is the intended function of this section: context-setting, justification, or policy implications? If policy, why not focus on Canada/Quebec-specific Indigenous health literature?

- **Suggestions**

Tighten to a shorter “Contemporary relevance in Canada/Quebec + implication for research priorities,” and move global examples to a brief paragraph or supplement.

6) “First signs of syphilis in Quebec, Canada”

- **Major concerns**

Key claims rely on **interpretation of historical accounts** (Cartier; Kalm; Gaumond/LeBlond), but the manuscript does not show the underlying descriptions (terminology used, symptom descriptions, differential).

The final sentence states no arguments for syphilis in Quebec before explorers, yet earlier you mention Cartier’s crew member (1535–1536). That needs reconciliation (is that “in Quebec”? or a retrospective label?).

- **Questions**
- For Cartier and Kalm: are you citing **primary text**, or later historians’ interpretations?
- For the “Baie Saint-Paul” illness: what features make it “resembling syphilis” vs other conditions, given your own caution about the lack of microbiological proof?
- Please clarify 1771 vs 1773 again here.

Suggestions

- Add a **timeline figure/table** for Quebec: (1535–1536), 1749, 1771/1773, 1785 spread, early 20th century tail.
- For each historical episode, include: “source type (primary/secondary), key symptom words used, why syphilis is plausible, key alternative explanations.

7) Conclusions / Declarations / Data availability

Comments

- The conclusion paragraph includes strong statements (“likely originated in the Americas”) that should be aligned with the acknowledged uncertainty.

Suggestions

Reframe conclusions into 3 parts: (1) what evidence supports, (2) what remains uncertain/contested, (3) what research would resolve it (aDNA in Canadian remains; systematic archival work).

Declarations

Potential competing interests: No potential competing interests to declare.