

# The Embodiment of Colonial Strategy:

## Osteoarthritis in Ancient Nubia

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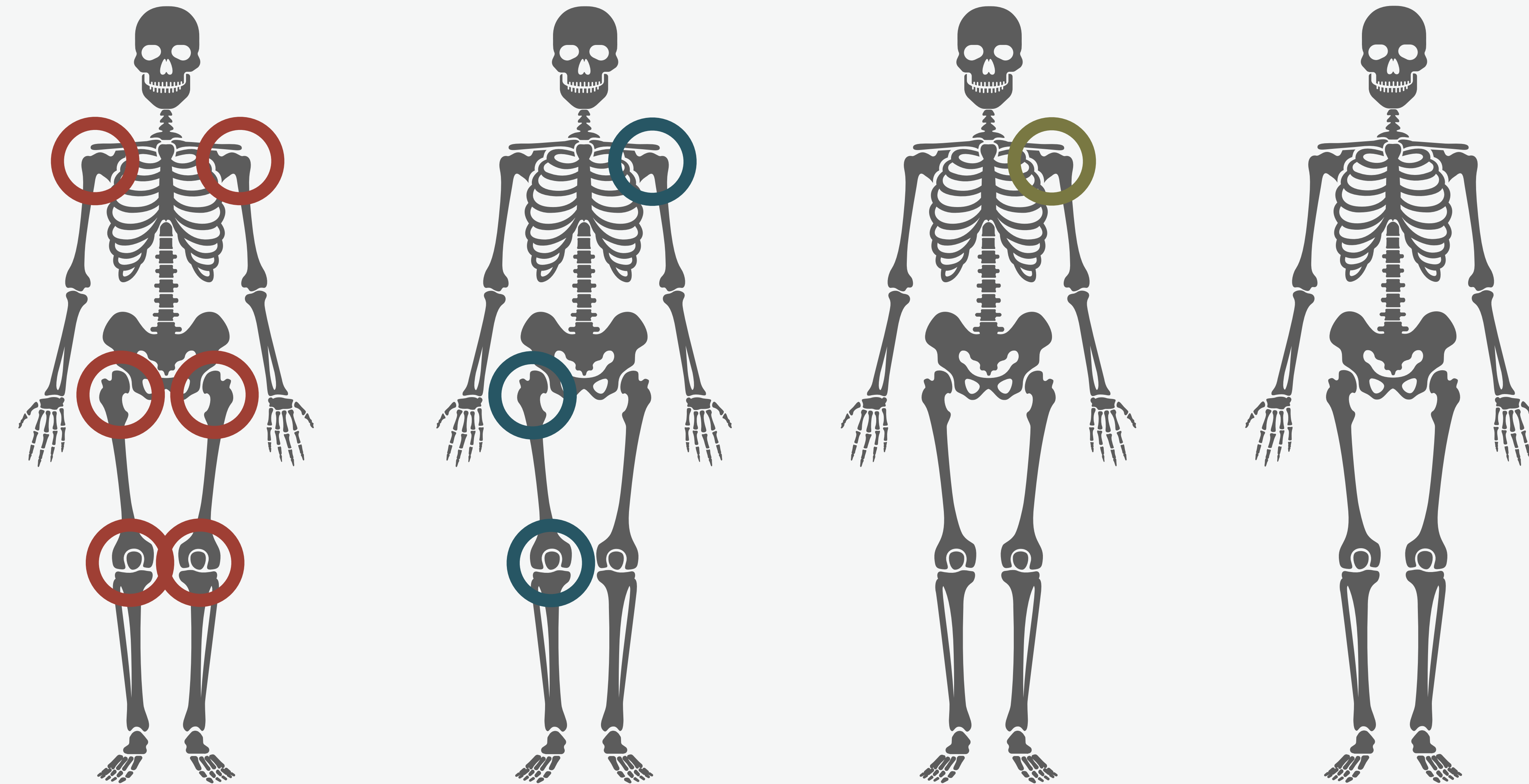
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- **Introduction:** Ancient Nubia was colonized by Ancient Egypt on multiple occasions and differing imperial strategies were used
- Did these strategies impact the prevalence and severity of osteoarthritis in Nubian communities?

Period	Date	Colonial Strategy	Sample
Middle Kingdom	2050-1650 BCE	Pre-Colonial	Kerma, 4th Cataract
		Militarized	C-Group
Second Intermediate Period	1650-1550 BCE	Post-Colonial	C-Group 2IP
New Kingdom	1550-1060 BCE	Resistance	C-Group NK
		Coexistence	Pharaonic, Tombos

- **Methods:** Accepted bioarchaeological methods for osteoarthritis assessment,<sup>1</sup> as well as sex<sup>2</sup> and age-at-death<sup>3</sup> estimation were used

## Colonial strategy affected osteoarthritis outcomes for indigenous populations.



Pre-colonial < **Militarized Colonization**

When Egypt conquered Nubia, built and occupied fortresses, and remained separated from the local population, osteoarthritis increased

**Militarized Colonization** > Post-Colonial

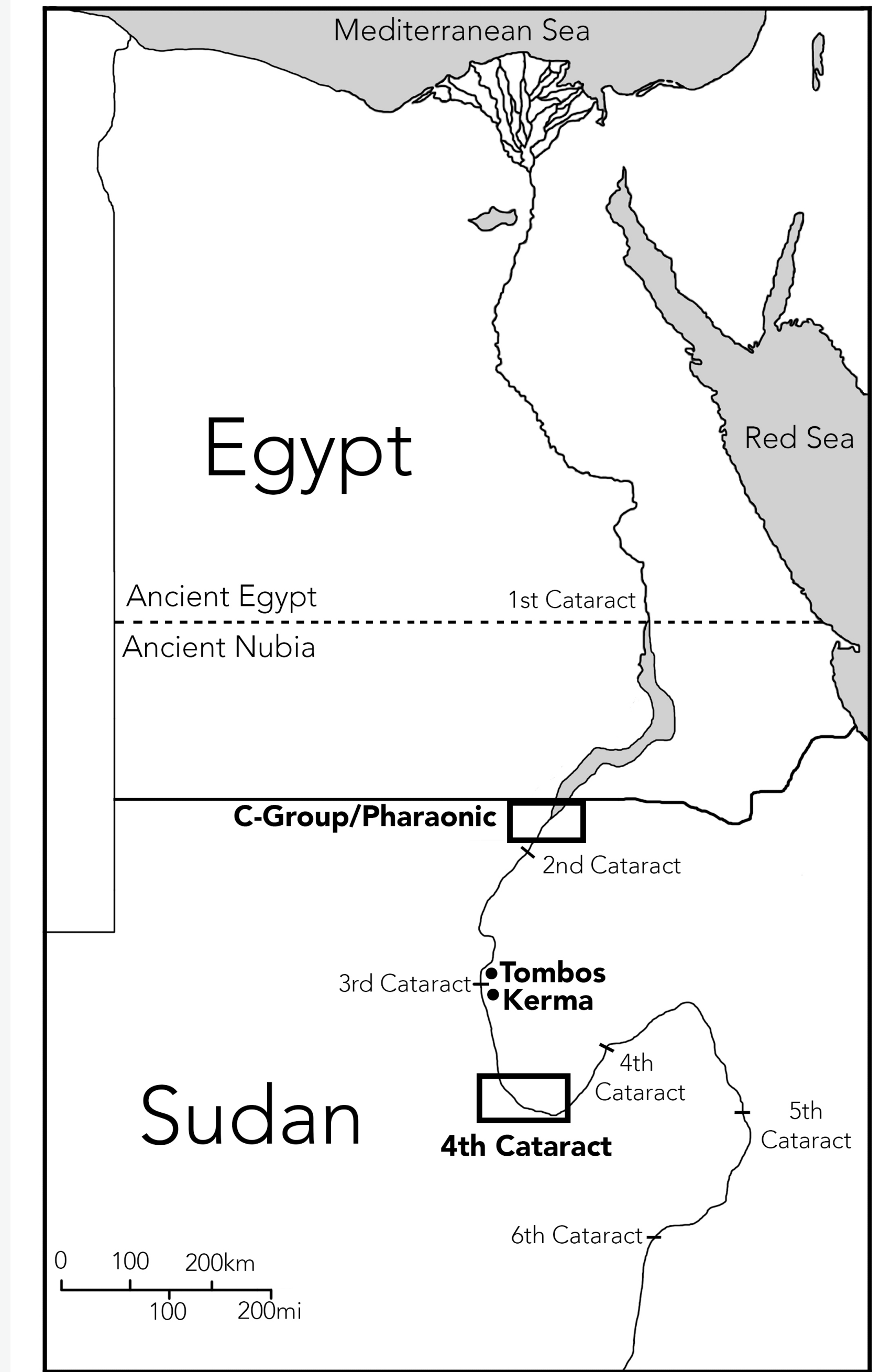
When the Nubian C-Group was no longer under the control of Egypt, the frequency and severity of osteoarthritis declined

Post-Colonial < **Resistance**

When this same space was reconquered, those that resisted colonization by maintaining traditional Nubian cultural practices had higher rates of osteoarthritis

Post-Colonial ≈ **Coexistence**

At the same time, osteoarthritis did not increase for those that partially or wholly adopted Egyptian cultural practices



**Skeletal Samples**

- **Conclusions:** Other authors have illustrated the negative consequences of colonization on local populations.<sup>4</sup> However, the data presented here illustrate that this is not a uniform imperial experience. Going forward, we should consider the broader context of these colonial strategies as they clearly have direct and profound implications for local populations.