

**MA Thesis – Human Skeletal Biology Track, Physical Anthropology - New York University
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**A PRELIMINARY STUDY OF THE USE OF ROOT DENTINE TRANSLUCENCY
AGING IN CREMATED DENTAL REMAINS**

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Abstract

The usage of Root Dentine Translucency (RDT) for determining the age at death of human remains is a widely used technique in forensic anthropology. Nevertheless, its applicability to cremated remains is untested. This pilot study explores the preservation of RDT in extracted cadaver teeth that have been experimentally burned (300-1200 °C for 12 hour intervals). Results suggest that RDT is a visible, and potentially reliable, age indicator until partial calcination obscures the microstructure of the dentine. The visibility of RDT in the 1200 °C test group also indicates that RDT may become visible if the remains reach a state of complete calcination. With further testing, it may be possible to adjust this method for use on forensic and, possibly, archaeological cremated material, thus expanding our aging methodology for cremains.