CBCT Usage in Post-Graduate Orthodontic Programs



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INTRODUCTION

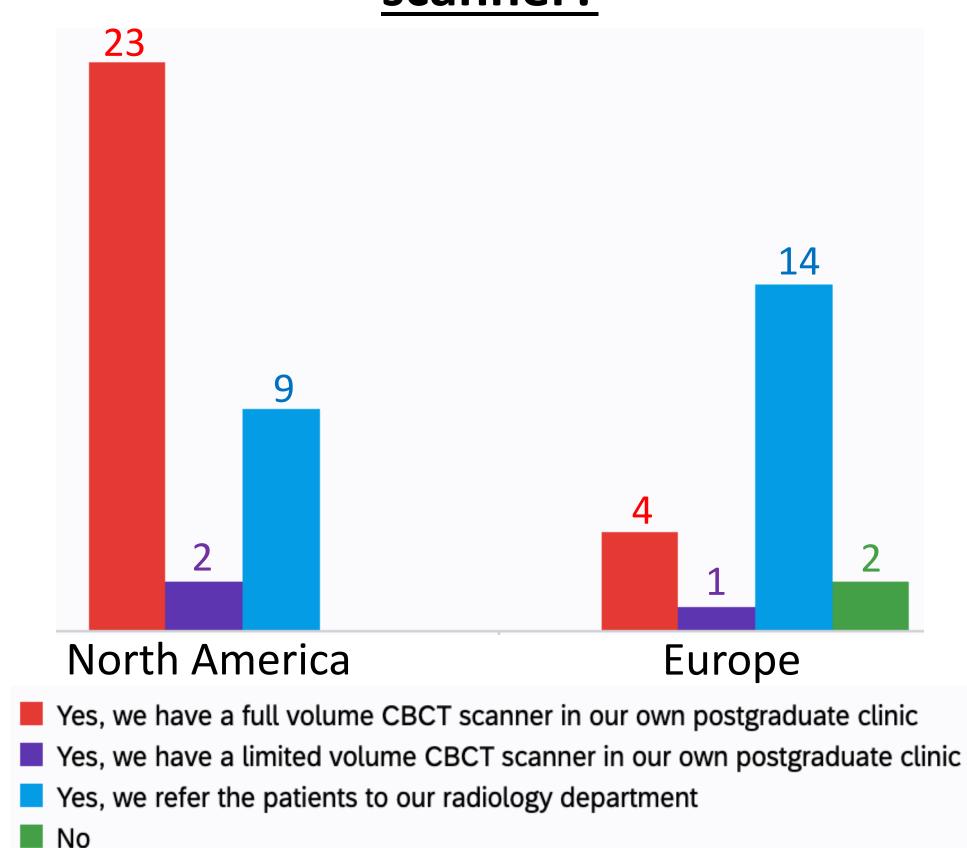
Cone-beam computed tomography (CBCT) has emerged over the past two decades as a rapid acquisition technology that has provided significant advancements in imaging quality and diagnostic information. Nevertheless, CBCT usage in orthodontic diagnosis and treatment planning remains controversial because of machinery costs and risks of radiation exposure. Of particular interest is the modern perspectives regarding CBCT usage in orthodontics. The purpose of this study is to assess latest trends of CBCT use in orthodontic residency training programs in North America and Europe.

MATERIALS & METHODS

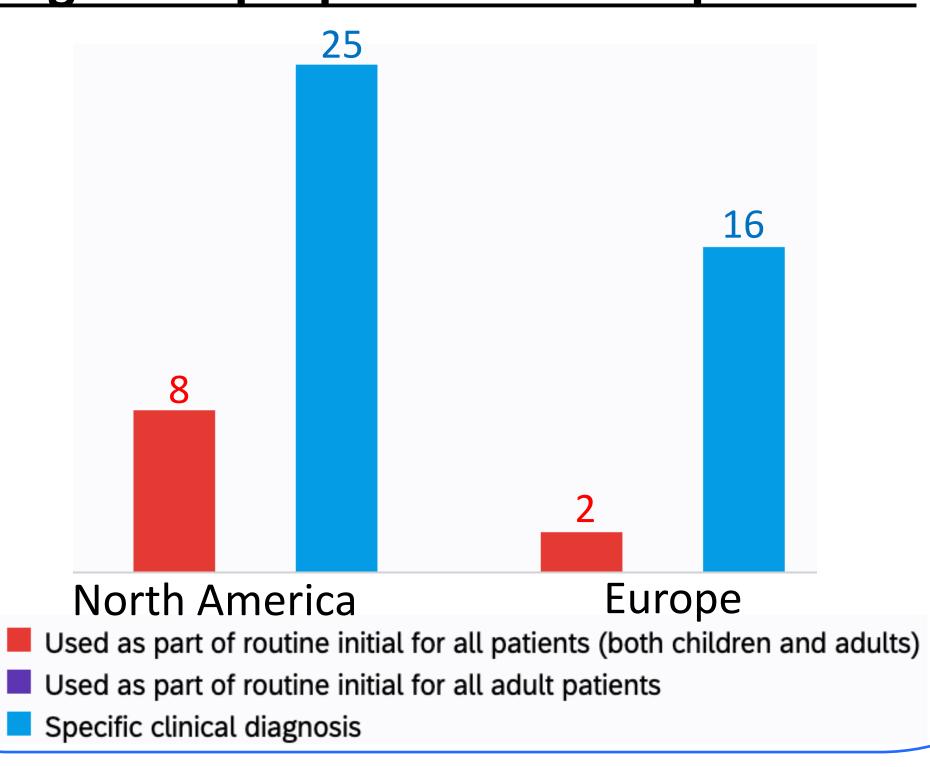
An electronic multiple-choice survey was sent via email requesting the anonymous participation of program directors of two-hundred and sixty-two (262) post-graduate orthodontic programs (73 North America and 189 Europe/Australia). Survey collection was over a two-month period with two follow-up emails sent two-weeks and one month after the initial email to each program director that had not responded. All survey responses were collected directly on Qualtrics for analysis.

RESULTS

Does your program have access to a CBCT scanner?

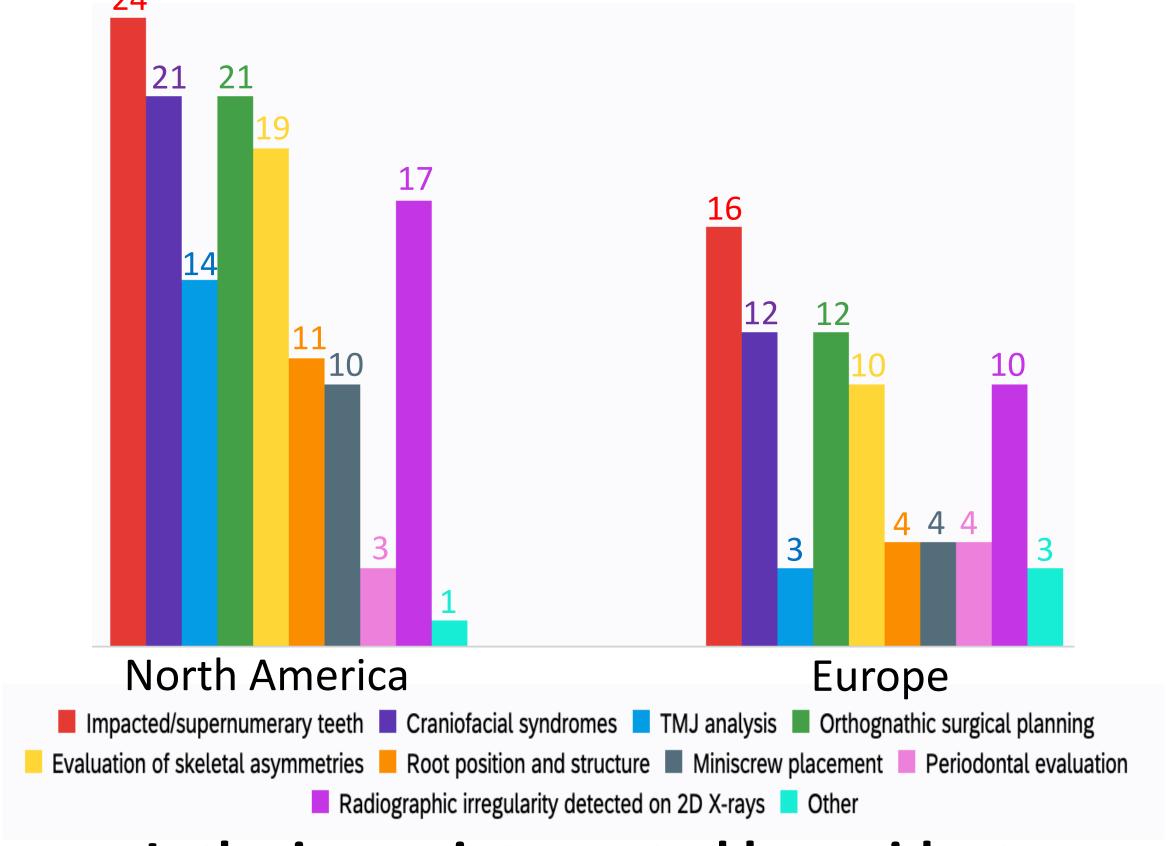


Is the CBCT scanner used for specific diagnostic purposes or for all patients?

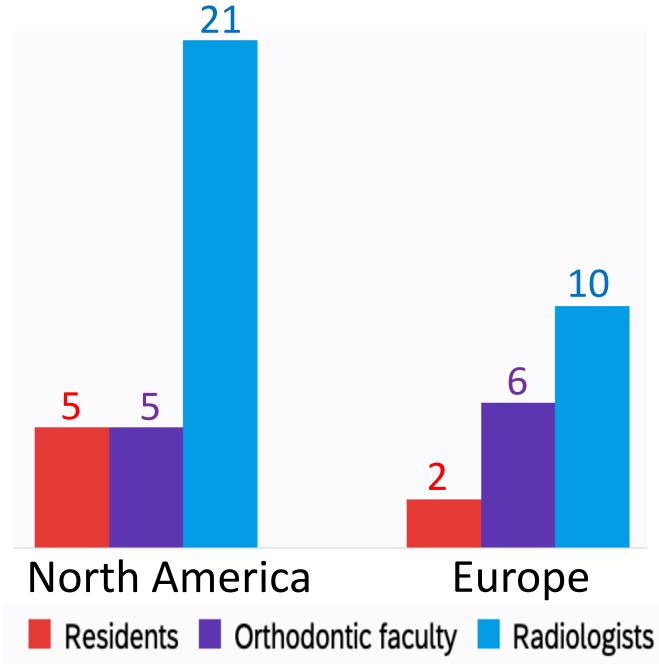


RESULTS CONT'D

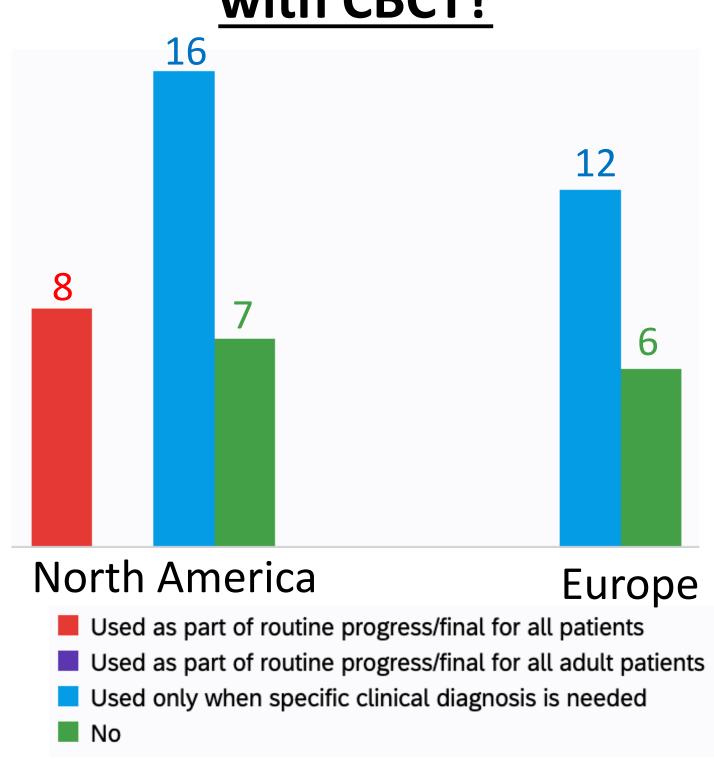
If only used for a specific clinical diagnosis, what does it tend to be used for? (please select all that apply)



Is the image interpreted by residents, orthodontic faculty or radiologists?



Do you take progress and final records with CBCT?



DISCUSSION & CONCLUSION

- •North American programs have more access to scanners in post-graduate clinics than European programs.
- •Top reasons for using CBCT: impacted/supernumerary teeth, craniofacial syndrome, orthognathic surgical planning, evaluation of skeletal asymmetries, and radiographic irregulates detected on 2D X-rays.
- •Not all programs have images interpreted by radiologists.
- •North American programs use CBCT scanners more routinely than European programs.