



## 'VOMIT' AND 'INCIDENTALUCENCY'



The acronym 'VOMIT' for 'Victims of Modern Imaging Technology', coined by Richard Hayward, a UK paediatric neurosurgeon, first appeared in the Personal View section of the British Medical Journal in 2003<sup>1</sup>. Hayward described, using two hypothetical case examples of 'innocent pathology', the considerable worry and anxiety evoked in the patient and their families by incidental radiological findings. Often fuelled by searching the internet for answers, considerable effort and time is needed to allay the resultant anguish and fear. It also highlights the dangers of recommending and/or embarking on potentially harmful, unnecessary and invasive investigations or irreversible interventions based on false positive results. The practice of ordering tests or investigations 'just to be certain' and for the sole purpose of exclusion is to be discouraged. 'VOMIT' has now passed into common healthcare parlance and serves as a warning.

In a previous editorial, the discovery of X-rays and the highly significant and invaluable benefits it brought to many disciplines in healthcare were extolled; radiography has even revolutionised the practice of endodontics<sup>2</sup>. The advent of newer, three-dimensional imaging techniques, such as cone beam computed tomography (CBCT), has brought further advancements to endodontics including enhancing diagnosis, aiding the management of dental trauma and resorption lesions, helping the planning of endodontic surgery and improving objectivity and accuracy when assessing treatment outcome. However, as CBCT becomes more common and rapidly available, the sinister threat of misuse and abuse of this imaging technology is looming.

To prevent 'VOMIT', patients becoming victims of overzealous imaging, CBCT should not be used routinely for endodontic cases but only in complex cases or if conventional radiographs are deemed in-

adequate. In keeping with radiation safety and the 'ALARA' (As Low as Reasonably Achievable) principle, the benefits of a CBCT scan must be justified and outweighed by any associated risks. This viewpoint on the use of CBCT in endodontics is endorsed by the joint position statement<sup>3</sup> issued by the American Association of Endodontists (AAE) and the American Academy of Oral and Maxillofacial Radiology (AAOMR), the SEDENTEXCT<sup>4</sup> and the European Society of Endodontology (ESE)<sup>5</sup> guidelines. In a recent publication, after examining the training requirements for the justification, acquisition and interpretation of CBCT imaging, the European Academy of DentoMaxilloFacial Radiology made recommendations for further training of dentists in Europe to ensure its safe usage<sup>6</sup>. CBCT imaging should only be prescribed by clinicians who have had appropriate training in CBCT radiology, adequate knowledge of endodontic applications of CBCT, experience in interpretation of CBCT images and an appreciation of the limitations of CBCT<sup>7</sup>. The inexorable advancement and development of healthcare imaging technologies means even greater care must be exercised to ensure prudent clinical application and to prevent misuse.

Related to 'VOMIT' is the term 'incidentaloma', coined over 30 years ago, and refers to the incidental discovery of a benign mass, which is often difficult to distinguish from a malignancy<sup>8</sup>. The popularity and increased usage of medical 'whole-body CT scanning', as part of health screening services and programmes, has led to an increased chance of abnormal findings that may need further evaluation<sup>9</sup>. As many incidentally found lesions may never cause disease, there is a risk of overdiagnosis. Beware of the 'red herrings'.

The endodontic equivalent of the 'incidentaloma' is, and I shall term, the 'incidentalucency' – an inci-

dental finding of a periapical radiolucency. The action to take, plus the pros and cons, following the incidental finding of a periapical radiolucency is open to debate<sup>10</sup>. Whilst it is impossible, in this editorial, to cover the subject of what to do with an 'incidentalucency', a timely reminder, as far as the use of imaging technology is concerned, is to avoid committing 'BARF' - Brainless Application of Radiological Findings!



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## References

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