Born-digital journal: 3 years' experience with publishing image-based articles

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MEDICAL IMAGE DATABASE SCIENTIFIC JOURNAL

Medical Image Database (MID) is a new type of journal founded 3 years ago through a non-governmental organization and publishes medical-image articles: an image and a text of no more than 250 words. MID uses double-blind peer review and is indexed in 4 databases: Google Scholar, I2OR, Index Copernicus and Scientific Indexing Services.

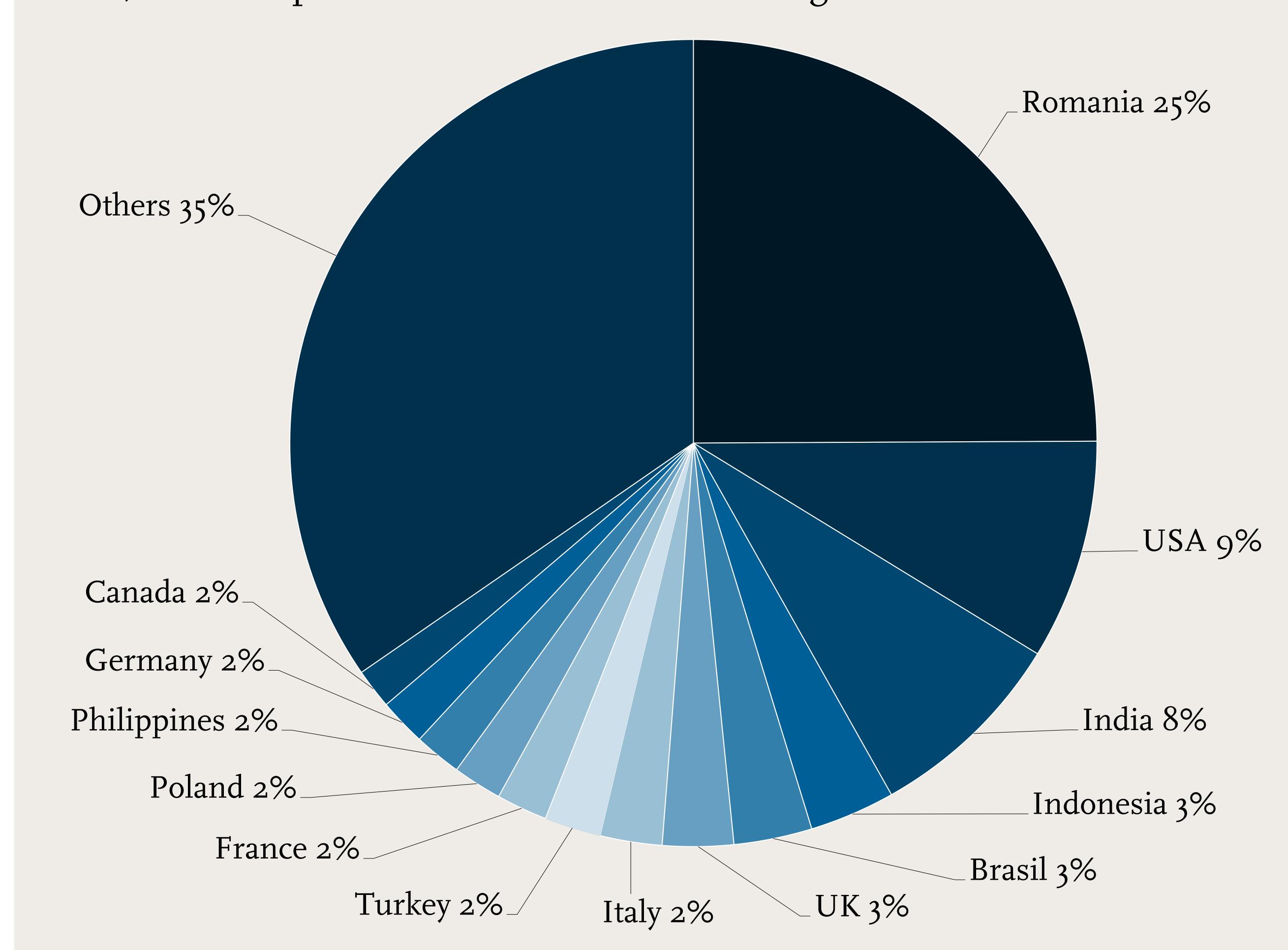
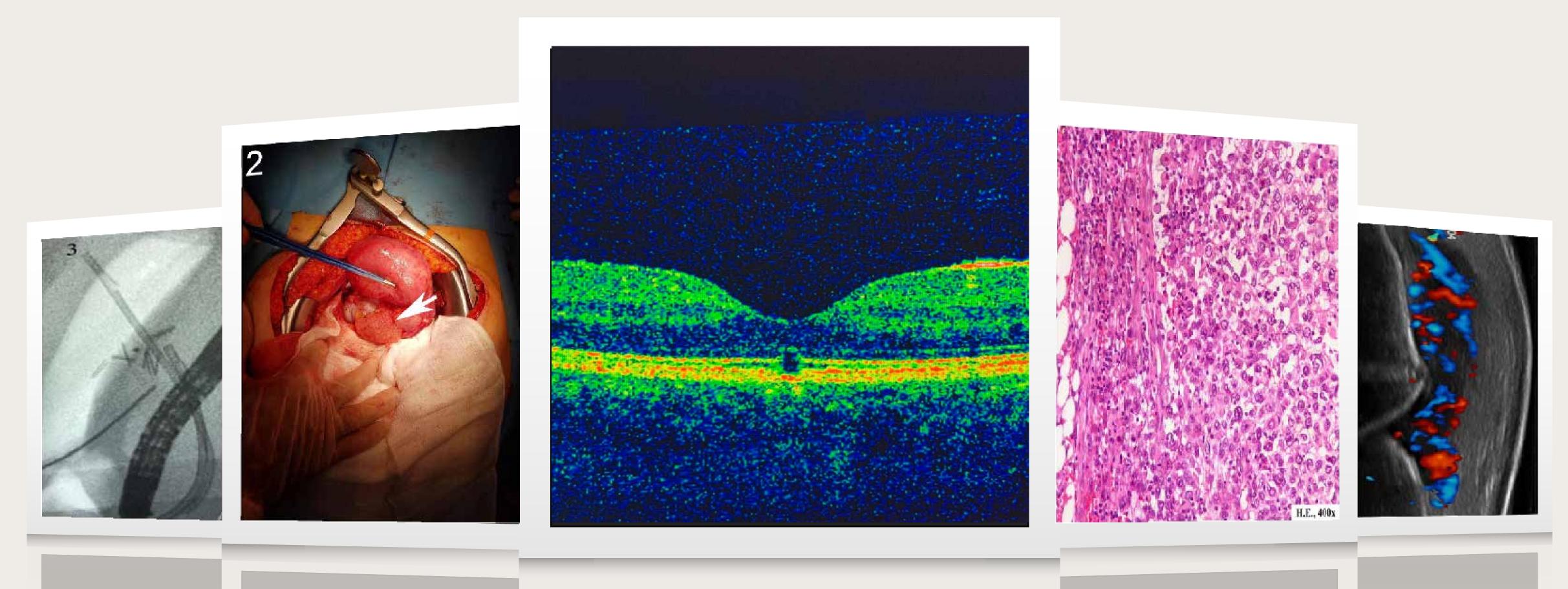


FIGURE 1 PIE CHART SHOWING THE READERSHIP DEMOGRAPHICS OF MEDICAL IMAGE DATABASE JOURNAL

WHY THE NEED FOR IMAGE-BASED ARTICLES?

Why the need for image-based articles? During daily practice as a clinician, one might encounter a rather interesting or very rare medical condition, best summarized through an image (or a collage) - easily captured by our everyday devices: from smartphones to CTs.



METHODS

We evaluated all the manuscripts (n=58), analyzed the errors authors make and classified them in four categories: (1) related to the title, (2) image, (3) text and (4) references and citations.

Table 1 Classification of the common errors found in manuscripts submitted to Medical Image Database journal

Type of error	Description of error
IMAGE	
Labelling	No arrows/arrowheads/asterisks, inappropriate color, "handwritten"
Framing	Inappropriate alignment of the anatomical landmarks
Background	Unnecessary information or distractions
Perspective	Deformed lesion size/shape due to unusual and unnatural angles
Resolution	Resolution less than 500 x 400 px, photo of another digital screen
Size and scale	Resizing without maintaining original aspect ratio, not using scale reference tools (a ruler/scalpel handle etc)
Visibility of detail	Visibility of relevant anatomical features
Legend	No legend, legend included within the figure itself
Patient identity	Inclusion of certain identifying features
Focus and exposure	Improper use of camera flash
REFERENCES AND CITATIONS	Missing/incomplete or inappropriate citation style
Text	
Referring to the figure	Not referring to the figure
Grammar	Grammar mistakes
Abbreviations	Undefined acronyms/abbreviations
TITLE	Too broad/vague or using acronyms/abbreviations

RESULTS

We found that 39% of errors are related to the image, 28% to references and citations, 23% to the text and 10% to the title. Our analysis shows an average submission-to-publication interval of 10 days.

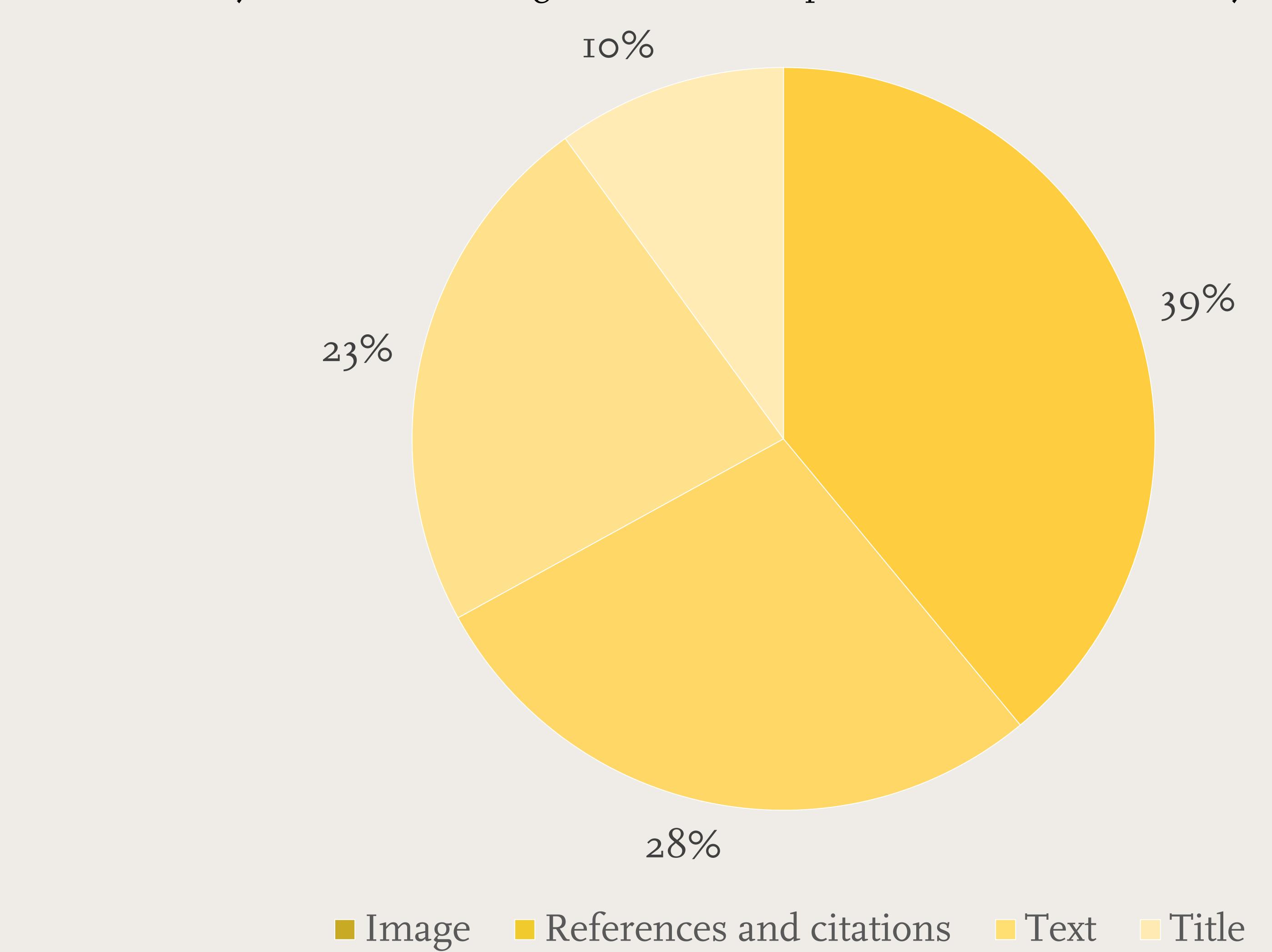


FIGURE 2 PIE CHART SHOWING THE PERCENT OF ERRORS RELATED TO THE IMAGE, REFERENCES AND CITATIONS, TEXT AND TITLE

Conclusions

In conclusion, this type of journal provides an efficient framework for publishing medical images, allows for a shorter publication time than conventional journals and shows a lacuna in medical training (standardized image taking and processing).



FIGURE 3 EXAMPLE OF ERRORS PERTAINING TO THE IMAGE: LABELLING, FRAMING AND BACKGROUND

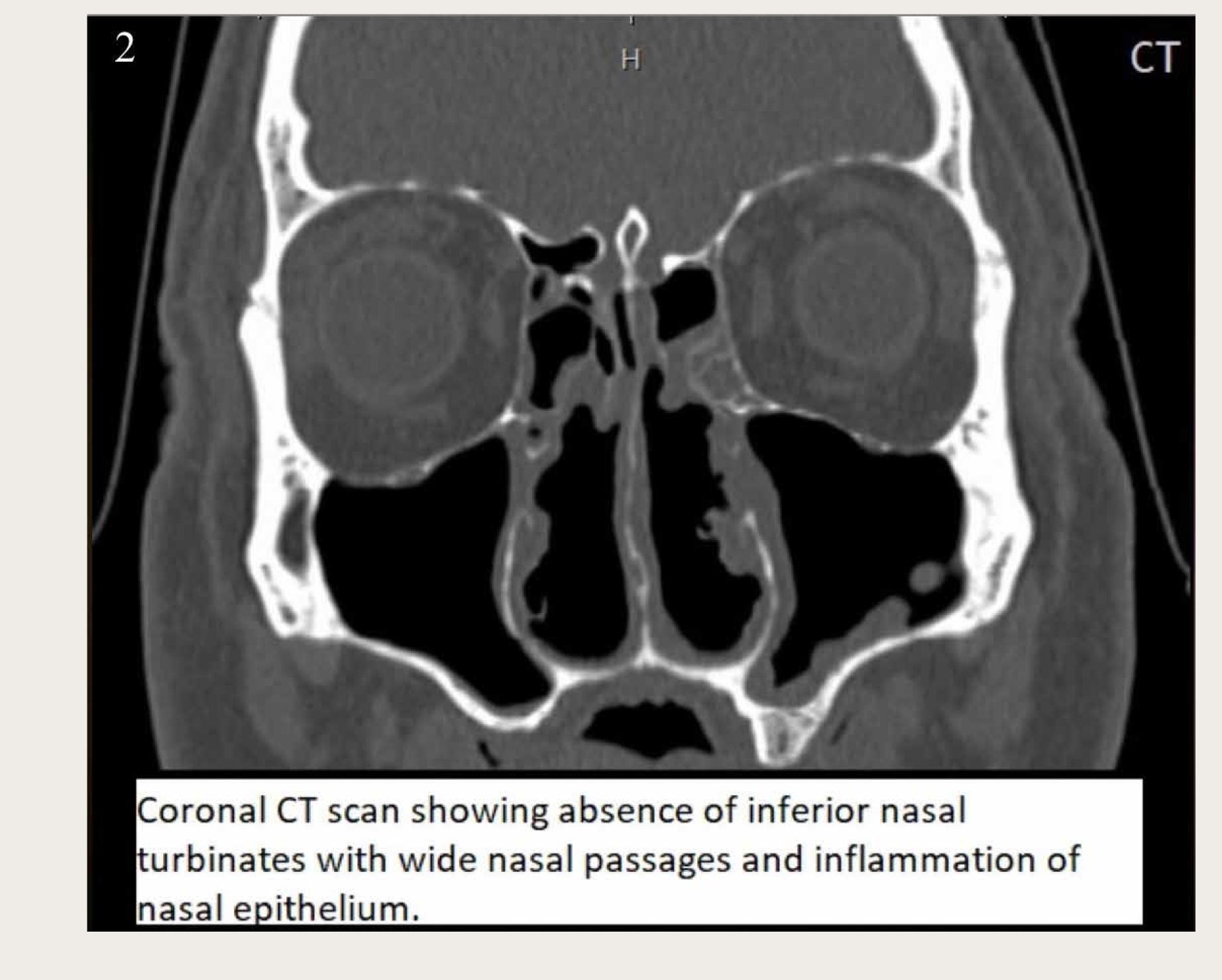


Figure 4 Example of error pertaining to the image: legend

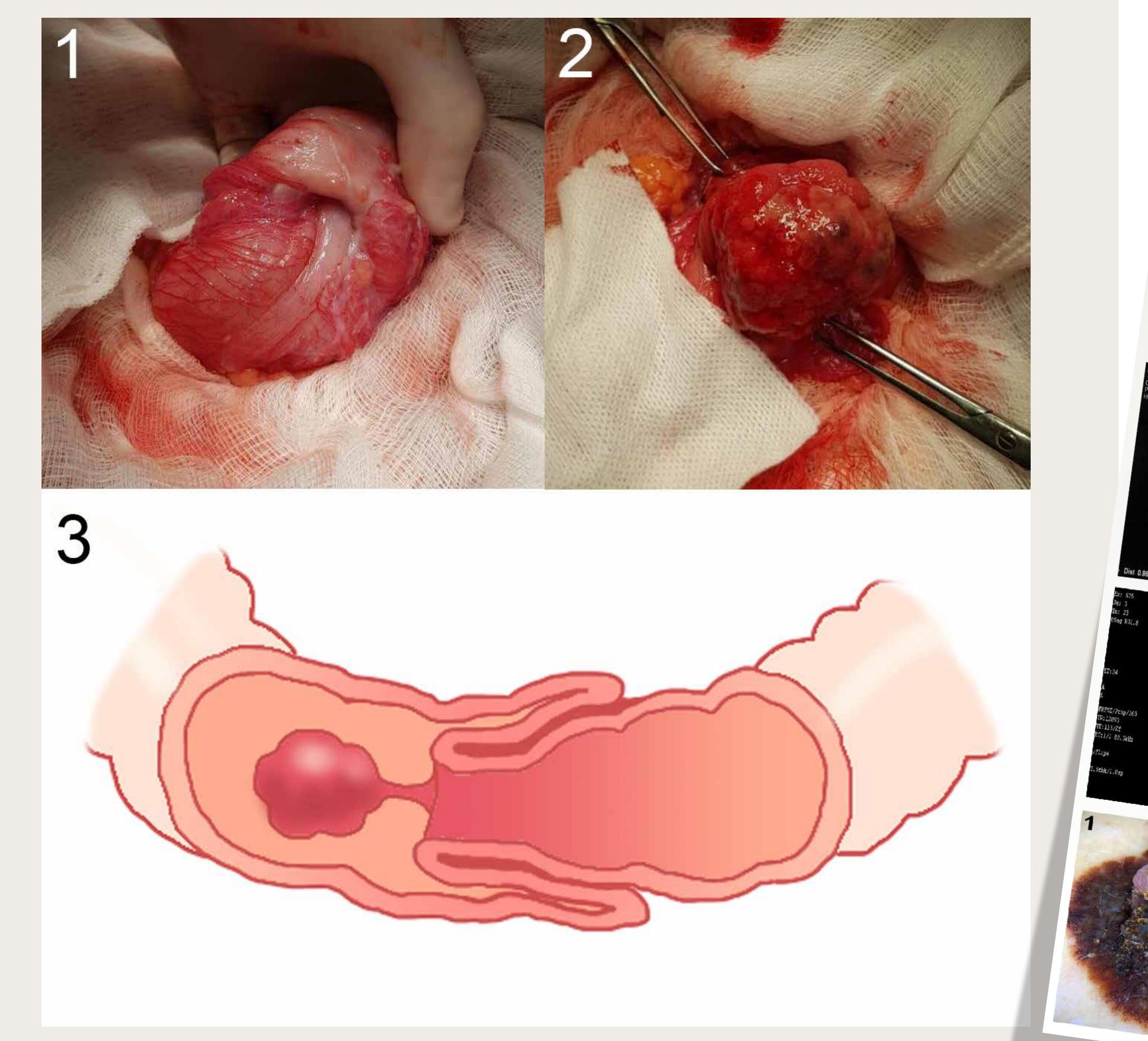


FIGURE 5 EXAMPLE OF A COLLAGE OF IMAGES THAT INCLUDES A MEDICAL ILLUSTRATION





