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**DEN1112 Oral Anatomy**

### **Richard's Anatomy**

Richard III (1461-1483), also known as Richard Plantagenet, Duke of Gloucester, was the King of England from 1452 to 1485. He was known for having usurped the crown from his nephew Edward the V and being defeated in the Battle of Bosworth Field by Henry Tudor, who would later become King Henry VII. For more than 551 years, the location of Richard's remains was a mystery with only approximate data on where he had fallen and supposedly buried. It wasn't until 2012 when a group of Archeologists from Leicester University, uncovered a body buried under a parking lot which they suspected belonged to Richard III. After DNA analysis it was confirmed that they had finally found the controversial king.

The article and videos about Richard's III project were extremely interesting, especially by the fact that lately, I have been learning in more detail the anatomy of the neck and head, as well as tooth/oral anatomy. The content presented a very thorough account of the archeological process of recovering King Richard's III remains as well as the scientific findings by analysis of anatomical structures and genetic studies. The content presented closely relates to the topics that have been covered in the Oral Anatomy course since as a Dental Hygiene student, I have been learning this material with a great amount of detail for the past month. For example, as the scientists were describing the injuries that may have killed the king, they showed a top view of the skull, and even when they do not name the bones themselves, I was able to recognize they were describing lesions in the Maxilla, Parietal, and Occipital bones.

Knowing this information I have studied so far, not only helped me recognize the name of the bones but also specific structures and orientations as they showed the archeological samples. I was able to clearly identify parts like the maxillary tuberosity, palatine process of maxilla, coronoid process, mandibular condyle, etc. At one point, when they were describing an injury just below the mental foramen, I was able to instantly determine they were on the right side, which shows how the Oral Anatomy lessons impacted the way I perceived the audiovisual content.

One of the pieces of information that really struck me, is how long the enamel and underlying tooth structures can withstand the pass of time without decomposing. Moreover, I was fascinated to learn that teeth can protect enclosed DNA material, which in fact is where the scientists were able to extract the most from.

On a personal level, what I found the most interesting, is the way anatomy serves as a road map to determine what happened to a person thousands of years ago. Just by looking at anatomical structures as well as shape and extent of the injuries, researchers were able to determine the type of weapon, the direction of the injury, whether such injury happened before or after death, among other key factors such as gender and age.

Ever since I started my studies in the fields of Biology and Healthcare, I have always said the human body is the perfect machine. It has always been captivating to me how every single structure that we have in our bodies has a reason to be there and a specific function, no matter how minimal it might seem. By watching and reading this material I now understand that Anatomy not only helps healthcare providers orientate themselves in order to assess and provide

treatment but it goes beyond because of its application to other scientific fields like Forensics, Bio Engineering and in the case of the Richard III project, Archeology.

### **Works Cited**

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