non-tumorigenic renal cells. **Material and Methods:** Human metastatic RCC (Caki-1) and normal renal (HK-2) cell lines were exposed to 0.1 - 200 µM sunitinib or pazopanib for 48 h. Cell viability was measured through the MTT reduction and LDH leakage assays. Clinically relevant concentrations of sunitinib (2 µM) and pazopanib (50 µM) were selected to further elucidate the mechanisms underlying their toxic effects. Antiproliferative activity was assessed by MTT at 24, 48, and 72 h. The production of reactive oxygen species (ROS), intracellular levels of total glutathione (tGSH) and adenosine triphosphate (ATP), and nuclear morphological changes were evaluated 48 h after drug exposure. **Results:** Both TKIs caused a concentration-dependent loss of cell viability, as measured by the MTT assay, which was more pronounced in Caki-1 cells (IC50 of 2.99 and 3.63 µM for sunitinib and pazopanib) than HK-2 cells (IC50 of 9.73 and 9.17 µM for sunitinib and pazopanib). Notably, no cellular membrane rupture was observed using the LDH assay up to a maximum concentration of 25 µM sunitinib and 200 µM pazopanib. Additionally, the results showed that 2 µM sunitinib significantly inhibited RCC cell proliferation but had no effect on HK-2 cells, whereas 50 µM pazopanib exhibited similar antiproliferative activity against Caki-1 and HK-2 cells. Intracellular oxidative stress mediated by both drugs was demonstrated by an increase in ROS formation in tumorigenic and non-tumorigenic cells; however, no statistically significant differences in tGSH and ATP levels were found. Apoptosis was a common mechanism of cell death induced by sunitinib and pazopanib, with treated cells exhibiting bright blue fluorescent, condensed and fragmented nuclei. **Conclusion:** The present data suggest that sunitinib has a more selective anticancer effect than pazopanib, with a consequent highest safety profile.

Keywords: renal cell carcinoma; tyrosine kinase inhibitors; antiproliferative; cytotoxicity; in vitro

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POSTER 135
Livor mortis

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Resumo

Introduction: Livor Mortis or hypothases is a condition postmortem, it is a physical process and one of the first to be observed on a body. The hypothases happens when blood circulation stops, this process happens because, due to the gravitational force, deposition occurs in the lower portions of the body. As a result of this rest, the skin color is discolored, leaving it with a purple color. Livor mortis can be observed on imaging and autopsy. This color can be observed during 2-4 hours after dead and it happens 1 hour after dead [1,2]. The skin color will not change for 9-12h after death so livor mortis can be observed during this time without any alterations of the color [3]. **Objectves:** This article aimed to clarify the term Livor mortis as well as to understand the advantages of its usefulness in the context of Legal Medicine. **Methods:** For this article, searches were carried out in databases such as Pubmed. **Results:** The Knowledge of the mechanism of livor mortis is important in forensics, being a factor that can allow the investigator to recognize a rearrangement in the death scene. Imaging and autopsies are techniques used to verify the existence of Livor mortis. The condition can be seen for 9-12 hours after death without significant changes in skin color. **Conclusions:** In short, hypothases is a process that starts occurs after 1 hour after death and it can be observed an alteration of the color skin, this can be seen by human eye or with the help of imaging techniques. It is a very useful tool in the area of Legal Medicine.

Keywords: livor mortis; hypothases; skin color

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POSTER 136

Dental anatomical aspects and their value to forensic dentistry

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Resumo

Introduction: Teeth are considered to be among the most resilient tissues in the human body, as they are able to resist cadaveric decay. Enamel is found to be very resistant to changes caused by time, the environment, and has the best resistance to diagenesis. The tooth is subject to taxonomic factors, which determine the composition and structure of the elements preserved from production to the actual state. Teeth are resistant to non-biological and mainly physical deterioration. **Objectives:** Use promising methods in the anthropological context, to reconstruct the biological profile of a person in which dental specimens are used as the object of study. **Methods:** Supported by recognized databases, a narrative review was performed. No time restrictions were placed on the search for scientific articles. **Results:** When dental remains are discovered it is necessary to evaluate the integrity of the remains and record them correctly. In archaeological studies, teeth are often found individually outside the jaws, so their identification is of utmost importance [1]. The identification of individual teeth depends on various details / morphological features of the crowns and roots. Odontometries established for the identification of teeth are used for forensic investigations. Metric and non-metric traits allow phylogenetic affiliation to be established [2].The need for gender assessment is critical in evaluating the biological profile of an archaeological and forensic context. It is necessary to reconstruct past societies for demographics, identity, and dental epidemiological settings [3,4]. The most significant thing in forensics is estimating the age of the individual at death, not the chronology that has passed since death. Estimating age at death is one of the most crucial aspects of bio archaeological and forensic investigations [5]. **Conclusion:** Forensic dentistry is considered as a primary method because it has several techniques that can be used in the process of human identification. Dental specimens are an inexhaustible source of information not only about gender, age, population affinity, taxonomy, but also about geographical origin, migration, oral condition, diet and profession. The relationship of anatomical particularities and forensic dentistry brings new possibilities to the forensic sciences.

Keywords: dental taxonomy; dental anthropology/methods; gender determination by teeth; age determination by teeth; odontometry

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