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Proceedings & Abstracts

reports were reviewed for the basilar artery fenestrations.

Results: In two (4%) patients of 50 analyzed CT reports, fenestration was found at the proximal basilar trunk. The two fenestrations in our series were not associated with aneurysm. No collateral branches originated from the two limbs of the fenestration.

Conclusion: In conclusion, basilar artery fenestrations are a rare finding. The knowledge of normal anatomy and variations of the arteries is useful teaching material for the anatomists. For the radiologists and neurosurgeons is important for performing complicated diagnostic and intervention procedures such as CT, MRI, angiography, surgical and endovascular procedures.

P058

The morphological and topographic characteristics of the proximal segment of the posterior cerebral artery

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Objective: The aim of this study was to present the shape and dimensions of the proximal segment of the posterior cerebral artery, the number and distribution of its branches, and their relations with the brain structures.

Method: The examination was made on 100 human brain specimens taken after autopsy; in which cerebrovascular pathology was excluded. Injection technique and microdissection were used.

Result: The results showed three types of the proximal segment of the posterior cerebral artery: basilar, carotid and intermediate, which directly depend of the way of forming of the distal segment of the artery. In 70% of the specimens basilar type was present (diameter from 1,5 to 3,3 mm, length from 3,6 to 11,2 mm). Carotid type was present in 24% (diameter from 0,8 to 1,4 mm and length from 9,6 to 22mm). In 6% of cases intermediate type was present (diameter from 1,8 to 2,3 mm and length from 5 to 11,2 mm). There were three types of branches arising from the proximal segment of the posterior cerebral artery: interpeduncular arteries (1-10), ramular artery (1) and quadrigeminal artery (1). The measuring of the interpeduncular arteries showed that their diameter was from 100 to 750 µm.

Conclusion: The morphological and topographic characteristics of the proximal segment of the posterior cerebral artery have great morphological and clinical significance resulting from the importance of the structures that this artery supplies.

P059

Ethical problems in pathology practice

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Objective: Identify the common ethical issues encountered in pathology practice on a day-to-day basis and to give some guidance on how these issues might be addressed.

Method: The principles of doing "Good" and not doing "Harm" are the essence of every code of medical ethics. The duty of medical doctors to their patients is to exercise their professional skills in an ethical manner and to observe the laws of community. The most essential purpose is to ensure that patient's trust in the medical profession is deserved. This is achieved by protecting the patients and ensuring that they are able to obtain the maximum benefits available in medicine. At the same time, medical ethics aim to protect patients from the abuse that can occur when one person is in a position of power.

Results: The four general principles in medical ethics (respect for autonomy, non-maleficence, beneficence and justice) apply in the field of pathology, but they are clumsy, because they are designed for face-to-face patient care. The widely accepted statement – "The health of my patient will be my first consideration" does not apply to pathology, simply because a pathologist does not have "my patient". The ethical problems of pathologist lie mainly in the conflicts between moral obligations to the responsible clinician (and other colleagues), to the patient and to society.

Conclusion: In a situation where an ethical decision has to be made, a problem arises when two or more ethical principles seem to conflict, and the difficulty lies in the relative weight to be attached to the different principles, balancing possible harms against benefits.

P060

The role of experimental animal studies in development and evaluation of radiopharmaceuticals for diagnosis and therapy of pathological diseases

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Objective: The goal of this work is to present our experience in establishment of the procedures and protocols for experimental studies as an essential part in development of new radiopharmaceuticals and quality control for the existing radiopharmaceuticals for the diagnosis and treatment of some pathological processes.

Method: The following experimental designed animal models were one of more important which results are already employed in clinical trials.

Generally, the most common animals used in experimental studies are rats and mice.

- Stasis-induced thrombus in the femoral vein after injection of thromboplastin to demonstrate Deep Venous Thrombosis using radiolabeled Tirofiban - GPIIb/IIIa inhibitor;
- Dialysis related amyloidosis induced by multiple application of beta2-microglobulin. The deposit in the osteoarticular tissues was detected using Tc-99m-labeled MDP, hIgG and specific beta2 microglobulin;
- Collagen-induced arthritis as a model of inflammatory arthritis to evaluate Tc-99mlabeled hIgG;

- Bacterial abscesses by the injection of *Staphylococcus aureus* to evaluate Tc-99mlabeled hIgG;
- Chemical induced Colon injury and inflammation (Croh_ disease) using TNSB to test orally administrated gelatin microspheres containing drug, were used for quality control of radiopharmaceuticals (Tc-99m MDP, Tc-99m hIgG, Tc-99m dextran, Tc-99m colloids);
- Liver Transplantation model to imaging of Allograft Rejection using radiolabeled Annexin V;
- The clinical utility of Tc-99m HIDA scintigraphy following liver surgery.
- per os administration of iodine labeled BSA loaded microspheres to show the strong adjuvant effect by inducing IgA secretion at the genito-urinary mucosa;
- athymic nude mice tumor bearing to demonstrate specificity of pretargeting technique referred to the Affinity Enhancement System (AES) using bispecific antibodies and radiolabeled bivalent haptens;

Conclusion: Employing experimental animal models is one the main way to introduce and tested new radiopharmaceuticals for many pathological processes, even this approach can never replicate the human disease or the multifarious and complex physical and psychological manifestations of the human conditions.