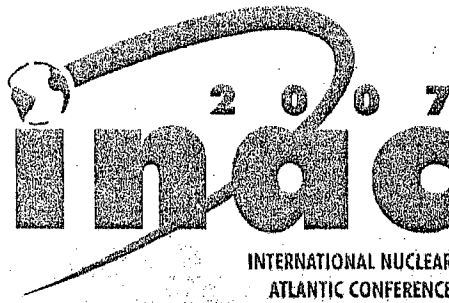
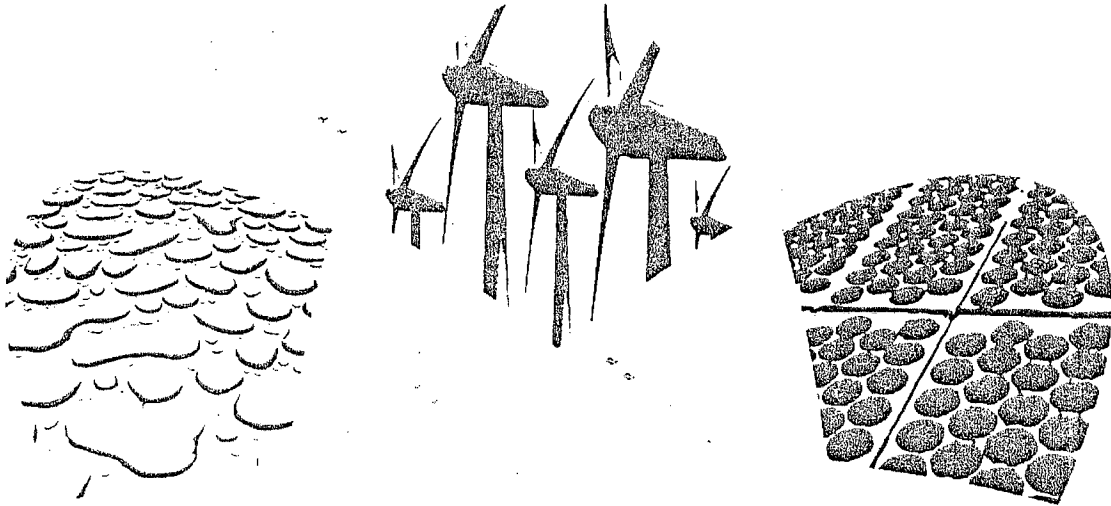


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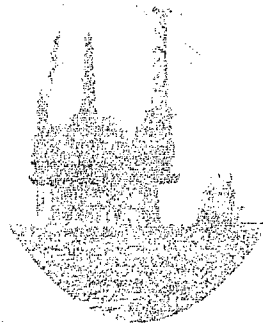
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>> ABSTRACTS <<

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**MORPHOMETRIC STUDY OF THE INJURIES IN THE SMALL INTESTINE OF WISTAR RATS SUBJECTED TO RADIATION BY COBALT-60**

Cristina S. C. Rocha, Germán A. B. Mahecha, Arno H. Oliveira, Renato J. Reis, Francisco A. L., Mario R. S. Silva

In order to understand the mechanisms of intestinal injuries due to ionizing radiation, four groups of male adult Wistar rats have been whole-body irradiated by cobalt-60 gamma-rays at three doses (2.0, 4.0 and 6.0Gy) and one dose rate (13.82Gy/h). Small intestine samples of the animals were taken 48h after the irradiation and immediately prepared for light microscopy, according to classical methods for histology. A large number of morphological differences were observed within the intestinal glands between the three doses used. It was observed that some of the epithelial glands alterations increased according to the dose used. Some of the alterations that can be highlighted are: the increase of the cellular and nuclear volume, basal cytoplasmic vacuolization, and cellular sloughed. Similar alterations were also observed in the goblet cell. The intestinal glands presented an increase of the luminal diameter. It was also observed atypical mitosis, cellular edema, and deformed nucleus in all the irradiated animals. The mitotic, apoptotic and necrotic index were calculated from intestinal gland cells. The mitotic index decreased according to the increase of the dose, but to all doses, there was an increase in relation to the control. On the other hand, the apoptotic index increased with the dose. The necrotic index presented an increase to all the doses. This rise was only significant to 2.0 and to 6.0Gy. All of the results were significant to 2.0 and to 6.0Gy compared to the control. This study shows a relation between dose and cellular death.

E11\_1136

**DIFFERENCES IN TRACE ELEMENT CONCENTRATIONS IN WHOLE BLOOD OF SJL/J MICE USING NAA**

Miriam F. Suzuki, Maria D. F. Carvalho, Cibele B. Zamboni, Osvaldo A. SantAnna,

The Br, Cl, K, and Na concentrations were determined in whole blood samples of SJL/J isogenic mouse using NAA and they were compared to other strains with well-established values. Also the similarities with human being reference values have been available. A discussion about these correlation in whole blood estimation allowed the choice of a better mouse strain as reference and for experimental model.

E11\_1211

**MICE IMMUNIZATION WITH RADIOATTENUATED PARACOCCIDIOIDES BRASILIENSIS YEAST CELLS: PROTECTIVE IMMUNITY INDUCTION EVALUATION**

Martins, E.M.N., Bernardo S. Reis, Alfredo M. Góes and Antero S. R. Andrade

Paracoccidiodes brasiliensis is the agent of paracoccidiodomycosis (PCM), a chronic systemic disease prevalent in Latin American. To date, there is no effective vaccine. The potential of gamma radiation for pathogens attenuation and vaccine development was explored in this work. In our laboratory was developed radioattenuated yeast cells of P. brasiliensis and the aim of this work was to evaluate the protection elicited by the immunization with this cells. To check the protector effect BALB/c mice were divided in two groups. The mice of group 1 were immunized one time and those of group 2 two times, at two weeks intervals, using 105 radioattenuated yeast cells. The mice were sacrificed 30 and 90 days after challenge. The removed organs were used for colony-forming units (CFUs) recover and histopathologic analysis. The gamma irradiated yeast loses its virulence since fails in producing infection in BALB/c mice. An efficient protection against highly infective forms of P. brasiliensis was developed in the group of mice immunized two times. The immunization was able to reduce the initial infection and elicited a long lasted protection. We concluded that the radioattenuated yeast cells are a valuable toll for the protective immunity study in the PCM and for vaccine research.

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