OCCUPATIONAL EXPOSURE TO ANTINEOPLASTIC DRUGS IN VETERINARY PRACTICE

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Handling cytotoxic drugs can imply the contamination of workplace surfaces and consequently workers exposure by dermal absorption. Mutagenicity, carcinogenicity, teratogenicity and acute side effects are linked with occupational exposure to these drugs [1].

The growing demand for advanced treatments in companion animals increased the use of cytotoxic and immunosuppressive drugs in veterinary practice [2]. Contrarily to human oncology, there are a small number of studies in veterinary oncology, therefore the aim of this study was to investigate the compliance rates of safety procedures in veterinary hospitals and clinics located in Lisbon that prepare and administrate cytotoxic therapies.

A checklist, organized in 18 sections, based on the International Society of Oncology Pharmacy Practitioners (ISOPP) standards of Practice was used as a support to define what would be considered the gold standards that provides the highest level of protection for the workers involved. From 46 veterinary hospitals and clinics located in Lisbon metropolitan area, 20 institutions reported performing chemotherapy and two veterinary hospitals, and two clinics accepted to participate.

The number of chemotherapy sessions varies between 12 per week to 3 per year. The most commonly cited drugs were vincristine (n=4), cyclophosphamide (n=4), doxorubicin (n=3), vinblastine and L-asparaginase (n=1). A dedicated room with a ventilated cabinet for the preparation of antineoplastic drugs was used only by one institution. Antineoplastic agents were predominantly prepared by veterinarians (n=3) and in one place veterinary nurses were also involved. Among the studied dimensions lower compliance rates were observed for *chemical contamination monitoring*, *ventilation tools* and *documentation*. The highest compliance rates were identified for *personnel, education and training* and *protection measures*. Future studies should include a higher number of participants and assess workplace surfaces contamination.

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