Effect of “PRINSO” (a washing powder) exposure on the rat skin

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Several household detergents and cleaning powders are blamed for their toxic effects on human skin. Recently a new washing powder, PRINSO is widely gaining popularity in many areas of Sri Lanka. It is manufactured by small scale entrepreneurs. They are also sold under other trade names such as “Ever Light”, “Vihanga” and “Diamond Light”. It consists of 2 sachets, one containing pink crystals (potassium permanganate) and the other containing white crystals (oxalic acid). There are some reports of deliberate intoxication of “PRINSO” by certain individuals to commit suicide. Nevertheless effect of “PRINSO” exposure on skin has never been studied. Objective of the present study was to investigate the effect of “PRINSO” exposure (short-term) on mammalian skin. Twenty eight rats were randomly selected. Rats were randomly assigned for treatments of distill water, “PRINSO” and other two common detergents namely “TIDE” and “SUNLIGHT”. Each group consisted of seven rats. In all rats, 4 cm² area of skin was shaved on dorsal area just behind the neck. Testing solutions were prepared according to the guidelines indicated by the manufacturer for domestic use. Each shaved skin patch of the rats was treated with 5 ml of respective testing solutions. Lesions were appeared after two days in the subjects where “PRINSO” solution was applied. Lesions were completely cured after 12 to 20 days. There were no detectable lesions in the control group and the other two detergent treated rats. As indicated by our data, effect of “PRINSO” on human skin should be tested rigorously.

Keywords: detergents, PRINSO, rats, skin lesions