Drug interaction during multidrug regimens for treatment of leprosy.

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The influence of concurrently administered rifampicin and clofazimine on the metabolism of 4, 4'-diaminodiphenyl sulfone (dapsone, DDS) has been studied in 30 subjects on multidrug regimens for treatment of leprosy. Plasma and urinary levels of drugs were determined on days 2, 8, and 15 after administration of the drug, while creatinine levels in urine were also determined to overcome the effect of diuresis. During concurrent administration of rifampicin the plasma levels of DDS gradually fell from day 2 to day 15 of rifampicin administration and the decrease was most significant on day 15. Clofazimine did not exert any such influence on DDS metabolism. A comparison of urine and plasma levels of DDS showed an inverse relationship between the plasma levels and urinary excretion of DDS during the course of treatment. The findings suggest that during concurrent administration of DDS and rifampicin, the intake of DDS should be regular and uninterrupted.

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