

graded the intensity of the symptom according to the same empirical scale as that used for pain intensity, and also indicated whether she thought the symptom was caused by the medication. Special other symptoms are those with larger scores when the double dosage was administered. Sleeping patients were awakened in order to obtain the data which were recorded on a report form by a trained observer and assembled into tables for evaluation. The statistical methods (means, variance analysis, and orthogonal contrasts) are presented in standard textbooks [COCHRAN and Cox, 1950; DIXON and MASSEY, 1951].

Results

320 patients in hospital I (UCLAH, BAUER) and 290 in hospital II (MCGH, BAPTISTI) participated in the study. The number of patients given each medication was the same in each institution strata (table I). Thus, the bias associated with institutions and pain strata should be distributed equally among the medications.

Each of the 610 patients supplied 18 sets of data for estimating efficacy and 14 for reporting adverse experiences. These 19,510 entries are not presented individually. Variance analyses for effectiveness are presented in table II. The main effects – hospitals, pain intensity, and medications – were expected to have significant variance. The unexpected findings were significant hospital intensity strata and hospital medication interaction variances. These findings indicate that the data obtained at the 2 institutions differ significantly and possibly should not be pooled. However, use of the primary interaction variance as the error term for main effects lends credence to the significance of the differences reported for hospitals, strata, and medications.

The upper graphs in figure 1 present the interactions between hospitals and pain intensity strata. The strong correlation present for the mean values at the 2 hospitals appears in the linear placement of the values. The interaction appears primarily as the minor displacement of the mean scores for stratum 3. The usual increase in SPID and decrease in relief scores with increasing intensity of initial pain is evident.

The lower graphs in figure 1 present the interactions between hospitals and medications. The differences among medications are not consistent for the 2 hospitals; therefore, the correlation is not pronounced. To a large degree, the correlation present is in response to medication H, the higher dose of propoxyphene and aspirin compound. However, even medication H apparently contributes to the significance of the hospital by medication interaction.