## Fused pyridine derivatives

R 0450 09- 157 Annelation of Drotaverine by p-Quinones to Form Hydroxyindolo- and Hydroxybenzindoloisoquinoline Derivatives. — The well-known spasmolytic agent drotaverine (I) readily reacts with quinones (II) to form Nenitzescu reaction products, viz. indoloisoquinolines (III), in moderate yield. The compounds (III) are smoothly O-acylated and O-alkylated. Aminomethylation of compound, (IIIb) occurs at the 6-position but fails for compound (IIIa). — (UKHIN\*, L. Y.; GRIBANOVA, T. N.; KUZ'MINA, L. G.; Russ. Chem. Bull. 54 (2005) 3, 774-783; Inst. Phys. Org. Chem., Rostov State Univ., Rostov-on-Don 344090, Russia; Eng.) — D. Singer

$$\begin{array}{c} c \ R^1, \ R^2: -H \ ; \ R^3: -Bn \ ; \ X: -Cl \\ d \ R^1, \ R^2: -H \ ; \ R^3: -CH_2-CH=CH_2 \ ; \ X: -Br \\ e \ R^1, \ R^2: -H \ ; \ R^3: -CH_2-C = CH \ ; \ X: -Br \\ f \ R^1-R^2: \ \ \ ; \ R^3: -Me \ ; \ X: -I \\ g \ R^1-R^2: \ \ \ ; \ R^3: -iPr \ ; \ X: -Br \\ \end{array}$$