Page 32

Ring Substituted Amphetamines

Of interest are studies of two ring-substituted amphetamine analogs, fenfluramine and chlorphentermine. Their structural formulae are given in Fig. 12.

FIGURE 12

RING-SUBSTITUTED AMPHETAMINE CONGENERS

$$\begin{array}{ccc}
CF_3 & CH_3 \\
CO - CH_2 - CH - NH - C_2H_3 & CI - CO - CH_2 - C - NH_2 \\
CH_3 & CH_3
\end{array}$$

FENFLURAMINE

CHLORPHENTERMINE

Figure 12. Structure diagrams of fenfluramine and chlorphentermine.

Fenfluramine

This drug (Pondamin®) is an appetite suppressant recently introduced into the United States. Clinical experience with this pharmaceutical in Europe is more extensive and indicates that fenfluramine is relatively devoid of amphetamine-like properties. Fenfluramine is not an important item of abuse. Levin, however, has identified clandestine abuse in South Africa but his report suggests that the subjective effects are not necessarily amphetamine-like.

In this study, d1-fenfluramine (60, 120, 240 mg); and d-amphetamine (20, 40 mg) and placebo were administered to 8 subjects at weekly intervals in single oral doses using a double blind, randomly assigned, cross over design utilizing standard methods.