

Allergies: When the Immune System Backfires

Mechanisms and manifestations of drug hypersensitivities

Five adverse drug reaction types

TYPE	TERM	CHARACTERISTICS	EXAMPLES
A	Augmented	Dose-dependent, frequent, predictable, drug overdose, explained by pharmacologic drug effect	Bleeding after anticoagulants, hypoglycemia from insulin
B	Bizarre	Dose-independent, rare, unpredictable, not explained by pharmacologic drug effect	Urticaria from aspirin, exanthem from antibiotics
C	Chronic	Dose and time dependent, rare, long-term exposure	Cushing syndrome from cortisone
D	Delayed	Time dependent, very rare	Kidney disease from long-term analgesics or non-steroidal anti-inflammatory drugs (NSAIDs)
E	End of treatment	Time dependent, rare, relapse after stopping a therapy	Withdrawal effects of drugs (eg opioids or antiepileptics), rebound or relapse phenomena