

FIGURE 4.40

Addition of tirapazamine to DNA radicals.

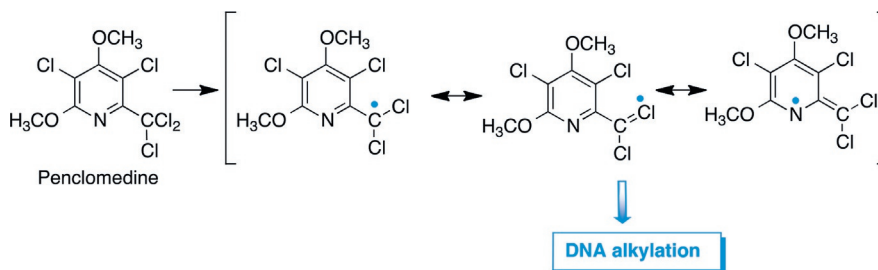


FIGURE 4.41

Generation of radicals from penclomedine.

## 11 RADIOTHERAPY AND RADIOSENSITIZERS

### 11.1 RADIOTHERAPY

Radiotherapy is one of the major approaches to cancer therapy, and it has been estimated that approximately 50% of cancer patients will receive this treatment during the course of their disease.<sup>113</sup> In several solid tumors, including lung, head and neck, gastrointestinal, and brain tumors, radiation is combined with standard cytotoxic chemotherapeutic agents. These radiochemotherapy regimes provide local tumor