

**TABLE 1 Comparison of CaNa<sub>2</sub>EDTA and Succimer for the Treatment of Lead and Zinc Intoxications**

|                                     | <b>CaNa<sub>2</sub>EDTA</b>  | <b>Succimer</b>   |
|-------------------------------------|--|---|
| <b>Trade names and formulations</b> | Calcium Disodium Versenate (3M); 200 mg/mL   | Chemet (Sanofi-Synthelabo); 100-mg capsules   |
| <b>Routes of administration</b>     | <ul style="list-style-type: none"> <li>▶ Slow IV infusion; IM or SC injection</li> <li>▶ Dilution with saline or 5% dextrose needed if given IV</li> </ul>   | Oral  |
| <b>Advantages</b>                   | <ul style="list-style-type: none"> <li>▶ Rapid absorption</li> <li>▶ Can chelate lead and zinc</li> </ul>  | <ul style="list-style-type: none"> <li>▶ Oral administration</li> <li>▶ Not nephrotoxic</li> <li>▶ Does not chelate essential minerals such as manganese and copper</li> <li>▶ More rapid clinical improvement in lead intoxication</li> <li>▶ More effective at removing lead from soft tissues</li> </ul> |
| <b>Disadvantages</b>                | <ul style="list-style-type: none"> <li>▶ Need for repeated IM or SC injections</li> <li>▶ Pain at injection site</li> <li>▶ Potential nephrotoxicity; need to monitor renal function regularly</li> <li>▶ Chelation of essential minerals such as zinc, manganese, and copper with long-term use</li> <li>▶ Potential to worsen central nervous system signs as a result of lead redistribution</li> </ul> | <ul style="list-style-type: none"> <li>▶ Less effective chelation of zinc; efficacy uncertain in zinc intoxication</li> <li>▶ Regurgitation noted in cockatiels</li> <li>▶ Potentially narrow margin of safety</li> </ul>   |
| <b>Recommended dosage</b>           | 10 to 40 mg/kg bid; 5- to 10-day treatment intervals interspersed with 3- to 5-day rest periods  | 20 to 40 mg/kg bid; rest period not essential, but periodic reassessment of lead and zinc concentration is recommended  |
| <b>Toxicity</b>                     | Doses of up to 270 mg/kg bid for 15 days caused increases in AST, LDH, CPK, and uric acid in domestic pigeons but no other abnormalities <sup>30</sup>   | <ul style="list-style-type: none"> <li>▶ 80 mg/kg bid caused death in cockatiels<sup>21</sup></li> <li>▶ 270 mg/kg bid not lethal for domestic pigeons (some increase in uric acid)<sup>30</sup></li> </ul>   |

AST = aspartate aminotransferase, CPK = creatine phosphokinase, LDH = lactate dehydrogenase