

Drug	Therapeutic dose	Route of administration	Absorption	Potential side effects	Nursing implications
<b>Metronidazole</b>	<ul style="list-style-type: none"> <li>Intravenous- 500mg within 60 minutes prior to surgery</li> <li>Oral- (immediate release) 1g every 3-4 hours</li> </ul>	Intravenous or Oral <ul style="list-style-type: none"> <li>IV- infuse over 30 to 60 minutes</li> <li>Oral- immediate release tablets and capsules may be administered with food to minimize</li> </ul>	<ul style="list-style-type: none"> <li>Well absorbed</li> <li>Half-life elimination for adults: approximately 8 hours</li> <li>Peak time is 1 to 2 hours</li> <li>Excreted as urine and as feces</li> </ul>	<ul style="list-style-type: none"> <li>Nausea, vomiting</li> <li>Constipation</li> <li>Headache</li> <li>Metallic taste and lack of appetite</li> <li>Hypersensitivity</li> </ul>	<ul style="list-style-type: none"> <li>Use with caution for patients with kidney and liver impairment</li> <li>Not recommended for use with pregnant individuals. There is risk for developmental abnormalities (i.e. cleft lip)</li> </ul>
<b>Piperacillin</b>	<ul style="list-style-type: none"> <li>Intravenous: 3-4 g every 4-6 hours.</li> <li>Do not exceed 24g daily</li> </ul>	Intravenous (IV) <ul style="list-style-type: none"> <li>Intermittent infusion over 20 to 30 minutes</li> </ul>	<ul style="list-style-type: none"> <li>Rapid absorption</li> <li>Half-life elimination for adults: approximately 1 hour</li> <li>Excreted as urine and in feces</li> <li>Peak time is 30 minutes</li> </ul>	<ul style="list-style-type: none"> <li>Hypersensitivity to individuals with penicillin or cephalosporin allergy</li> <li>Bleeding</li> <li>Prolonged use may result in infection</li> <li>Confusion</li> <li>Hypokalemia</li> <li>Thrombophlebitis</li> </ul>	<ul style="list-style-type: none"> <li>Not recommended for geriatric population with history of heart problems because it has lower sodium content</li> <li>Assess patient's allergy history</li> </ul>
<b>Cefoxitin</b> (2 <sup>nd</sup> generation Cephalosporin)	Recommended: <ul style="list-style-type: none"> <li>2g given 30-60 mins prior to surgical incision</li> <li>Repeat dose in 2 hours if surgery prolongs or in case of extreme blood loss during surgery</li> </ul>	Intravenous (IV) <ul style="list-style-type: none"> <li>Intermittent infusion over 10 to 60 minutes</li> </ul>	<ul style="list-style-type: none"> <li>To body tissues</li> <li>Half-life elimination for adults: 41-59 minutes</li> <li>Excreted as urine</li> <li>Peak time is within 20-30 minutes</li> </ul>	<ul style="list-style-type: none"> <li>Diarrhea</li> <li>Hypersensitive with individuals with penicillin allergy</li> </ul>	<ul style="list-style-type: none"> <li>Educate patient on signs of adverse reaction (e.g. fever, itching, cough, swelling of throat, chest tightness, etc...)</li> <li>Use with caution for individuals with penicillin allergy.</li> </ul>