

*Erratum*

## Role of Oxygen Radicals in the Microcirculatory Manifestations of Postischemic Injury

M.D. Menger, H.-A. Lehr, and K. Messmer

Institut für Chirurgische Forschung, Klinikum Großhadern, Ludwig-Maximilians-Universität München

Klin Wochenschr (1991) 69:1050–1055

Figure 2 in the above article should be replaced by the following diagram:

ISCHEMIA	REPERFUSION	
no-flow	no-reflow	reflow-paradox
hypoxia	prolongation of hypoxia	reoxygenation
<ul style="list-style-type: none"> <li>● energy rich phosphates ↓</li> <li>● sodium/potassium pump ↓</li> <li>● shift of water and ions</li> </ul> <ul style="list-style-type: none"> <li>▶ microvascular hematocrit ↑           <ul style="list-style-type: none"> <li>→ blood fluidity ↓</li> <li>→ microvascular resistance ↑</li> </ul> </li> <li>▶ microvascular hematocrit ↑           <ul style="list-style-type: none"> <li>▶ swelling of endothelial and tissue cells</li> <li>▶ microvascular resistance ↑               <ul style="list-style-type: none"> <li>→ capillary occlusion</li> </ul> </li> <li>▶ pH ↓               <ul style="list-style-type: none"> <li>→ blood cell deformability ↓</li> <li>→ capillary plugging</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▶ microvascular hematocrit ↑           <ul style="list-style-type: none"> <li>→ blood fluidity ↓</li> <li>→ microvascular resistance ↑</li> </ul> </li> <li>▶ swelling of endothelial and tissue cells           <ul style="list-style-type: none"> <li>→ microvascular resistance ↑               <ul style="list-style-type: none"> <li>→ capillary occlusion</li> </ul> </li> </ul> </li> <li>▶ pH ↓           <ul style="list-style-type: none"> <li>→ blood cell deformability ↓</li> <li>→ capillary plugging</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● formation of oxygen radicals</li> <li>● release of mediators (cytokines, eicosanoids, proteases)</li> <li>● PMN activation (PMN-endothelium interaction)</li> </ul> <ul style="list-style-type: none"> <li>▶ lipid peroxidation</li> <li>▶ membrane disintegration</li> <li>▶ loss of endothelial integrity</li> <li>▶ microvascular permeability ↑ (interstitial edema)</li> </ul>

↓                           ↑

**tissue damage**

ISCHEMIC INJURY      REPERFUSION INJURY

**Fig. 2.** Pathomechanisms of microvascular and cellular injury in ischemia-reperfusion, including the no-flow state during ischemia, as well as no-reflow and reflow-paradox during postischemic reperfusion