

In Critical Care

- 1. Diabetic nephropathy is a progressive disease marked by the transition from glomerular hyperfiltration to albumin- uria to progressive chronic kidney disease (CKD) and, finally, end-stage kidney disease.
- 2. In diabetic nephropathy, overactive renin-angiotensin-aldosterone system (RAAS) activity and direct vasoactive activity mediated by tubuloglomerular feedback (TGF) lead to disproportional afferent arteriolar vasodilation and efferent arteriolar vasoconstriction, thereby altering glomerular hemodynamics, resulting in hyperfiltration.
- 3. RAAS inhibitors (angiotensin-converting enzyme [ACE] inhibitors or angiotensin receptor blockers [ARBs]) and sodium—glucose cotransporter 2 (SGLT-2) inhibitors are renoprotective agents through the preservation of glomerular hemodynamics.
- 4. Diabetic retinopathy is the leading cause of blindness in working-age adults worldwide.
- 5. The most important risk factors for developing diabetic retinopathy are a long duration of diabetes, inadequate glucose control, and elevated blood pressure.
- 6. Treatment of diabetic retinopathy can be divided into observation, intravitreal injections, laser therapies, and surgery. Most affected patients may be observed, but treatment is warranted for diabetic macular edema (DME) and proliferative retinopathy.
- 7. Diabetic neuropathy is classified into different syndromes, including distal symmetric polyneuropathy; diabetic autonomic neuropathy; radiculoplexus neuropathy; and focal neuropathies, including cranial neuropathies.
- 8. Diabetic neuropathy is present in up to 50% to 66% of people with diabetes, with distal symmetric polyneuropathy being the most common pattern of disease.
- 9. Symptomatic treatment of diabetic neuropathy focuses on the management of neuropathic pain, in addition to other supportive measures to prevent further health consequences.
- 10. Macrovascular complications, most commonly manifested as atherosclerotic cardiovascular disease (ASCVD) and heart failure (HF), are very common in people with diabetes and are the leading cause of morbidity and mortality.

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