

FIGURE 90.1 Leading causes of maternal death in the United Kingdom. Deaths per 100,000 maternities. (From Cantwell R, Clutton-Brock T, Cooper G, et al. Saving mothers' lives: reviewing maternal deaths to make motherhood safer: 2006-2008. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. *BJOG*. 2011;118[Suppl 1]:1-203.)

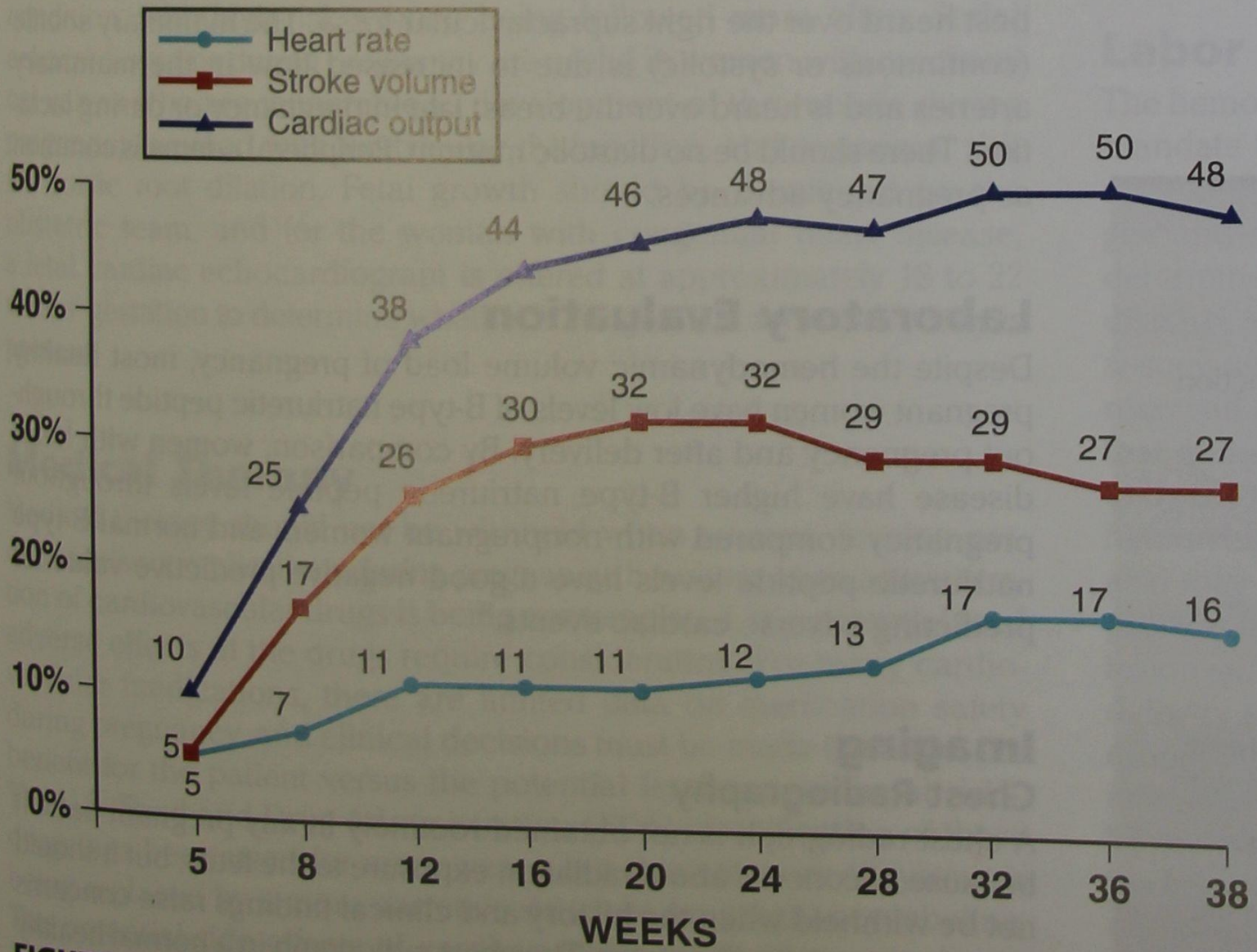


FIGURE 90.2 Hemodynamic changes in pregnancy. Percentage of changes in heart rate, stroke volume, and cardiac output measured in the lateral position throughout pregnancy compared with prepregnancy values. (From Elkayam U, Goland S, Pieper PG, Silverside CK. High-risk cardiac disease in pregnancy: part I. *J Am Coll Cardiol* 2016;68:396-410.)

TABLE 90.1 High-Risk Cardiac Conditions During Pregnancy

Pregnancy Is Contraindicated

Pulmonary hypertension from any cause

Eisenmenger syndrome

Dilated cardiomyopathy with severe left ventricular systolic dysfunction (subaortic ventricular ejection fraction < 30%)

Peripartum cardiomyopathy with residual left ventricular systolic dysfunction

Symptomatic severe aortic stenosis

Severe mitral stenosis

Marfan syndrome with an aortic root dimension > 45 mm

Inherited aortopathies: Vascular-type (type IV) Ehlers-Danlos syndrome, Beery-Dietz syndrome with any aortic dilation, Turner syndrome with aortic dilation ≥ 2.7 cm²

Chronic aortic dissection

Pregnancy Is High Risk

Mechanical prosthetic valves

Dilated cardiomyopathy with moderate left ventricular systolic dysfunction

Severe asymptomatic aortic stenosis

Unrepaired coarctation of the aorta

Cyanotic cardiac heart disease (non-Eisenmenger syndrome)

Fontan circulation

Complete transposition of the great arteries with Mustard or Senning operation

Other complex congenital heart diseases