

A 5- to 6-month course of chemotherapy must follow the operation in most patients.

Of all the solid tumors, ovarian cancer is one of the most responsive to cytotoxic chemotherapy. Cisplatin has been used, although it has serious toxic effects. Carboplatin, a newer agent, is virtually identical in therapeutic effect but is less toxic. The response rates associated with either agent approach 70% to 80%. Approximately 50% of patients have no clinical evidence of disease at the end of the therapeutic course, but relapse is common and most patients ultimately die of complications of progressive cancer.

As already noted, patients with stage 1 disease have the best prognosis. Indeed, in younger women diagnosed with stage 1 disease who wish to maintain their fertility or childbearing potential, it may be reasonable to consider either unilateral oophorectomy to preserve fertility, or bilateral oophorectomy and preservation of the uterus for in vitro fertilization.

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#### SUGGESTED READING

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### A STRATEGY FOR THE SYNCOPE WORKUP

**T**he patient who presents with syncope (temporary loss of consciousness and postural tone) or orthostatic hypotension (a blood pressure drop upon standing) could have one of several problems. If the diagnostic workup is not carefully thought out, both time and money will be wasted before the patient receives appropriate therapy.

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#### THE WORKUP

In general, the workup should include a screening tilt test, determination of blood volume, and evaluation of hemodynamics. The advent of noninvasive radionuclide techniques facilitates the assessment of hemodynamic indices in an outpatient setting. Results of these studies will indicate whether the

cause is autonomic, homeostatic, or cardiac dysfunction and will guide the selection of other diagnostic studies. A complete workup generally must include input from specialists in cardiology, neurology, and electrophysiology.

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#### AUTONOMIC DYSFUNCTION

The hallmark finding of autonomic insufficiency is a blocked Valsalva maneuver. The blood pressure continues to fall and does not reach a plateau during phase 2 of the maneuver; during phase 4, because of a lack of vasoconstriction, there is no "overshoot" in blood pressure level.

Patients with autonomic dysfunction have a typical response to the tilt test. When the table is tilted up, their blood pressure drops continuously; it does not reach a plateau. When the table is tilted back down, the blood pressure rises, and it overshoots because the patient is unable to regulate the total peripheral resistance. That is why, when attending a patient who has fainted, it is important to put the head down gradually, but not all the way to 0 degrees. If the patient has autonomic insufficiency, the blood pressure could overshoot and a stroke could result.

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#### VASOVAGAL SYNDROME

Vasovagal syndrome is a possible cause if there is a history of recurrent fainting preceded by nausea. On the tilt test, the initial blood pressure response is stable at first, followed by a precipitous drop in both heart rate and blood pressure. The patient will go into asystole if the tilt test is continued. The clinical dilemma with this syndrome is that it can happen at any time, and with varying frequency. It is difficult to decide whether and when to treat with a pacemaker, since the syndrome occurs more frequently in adolescents, and when to rely on common sense and reassurance. Instead of treating right away, it may be more practical to pursue additional testing in an effort to identify a treatable underlying cause, such as low blood volume or peripheral venous pooling.

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#### HYPOVOLEMIA

Although patients with idiopathic hypovolemia seem to have a higher incidence of vasovagal syncope, it is not the blood volume but the *distribution* of the blood volume that determines the risk of syn-

cope. Patients who faint have more venous pooling. The presence and degree of venous pooling can be determined by calculating the ratio of cardiopulmonary blood volume to total blood volume, both at rest and during tilt testing. The normal ratio is about 16. A ratio of 12 indicates very poor venous support. Venous pooling can be treated with support hose, exercise to maintain muscle tone, and possibly dietary sodium and vasoconstricting drugs.

#### ARTERIAL CAUSES

Decreased arterial compliance in large arteries may contribute to syncope. In small arteries, amyloidosis, decreased vascular reactivity, or a hyper-beta-adrenergic state may be present. The hyper-beta state is relatively more common in young women. It has an acute onset and is characterized by hyperkinetic circulation and a hyperresponse to beta-adrenergic agonists. It is easily treated with beta-blockers. The problem with this disorder is that it is often not suspected; the patient is subjected to a workup to rule out pheochromocytoma and, when that is negative, psychiatric evaluation is commonly recommended.

#### CONCLUSION

Syncope is relatively common, accounting for 1% to 6% of hospital admissions and 3% of emergency room visits. These numbers probably do not reflect the true prevalence because of underreporting. Adolescent patients assume they will outgrow their "spells" and older patients attribute them to "normal aging."

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