

Management of Patients With Uveal Melanoma

Bertil E. Damato

INTRODUCTION

The management of patients with uveal melanoma encompasses detection, diagnosis, prognostication, treatment, counseling, and surveillance (Box 39-1).

DETECTION

Early detection of uveal melanoma greatly improves the chance of conserving a useful eye and is perhaps vital in the prevention of metastatic spread, especially if the tumor is small.

REFERRAL PROCEDURE

The time between initial tumor detection and treatment depends greatly on the method of patient referral. The author has seen long delays with tragic consequences because the referral letter or fax was not received by the ocular oncology center. It is therefore important to give the patient a contact telephone number together with advice as to what to do if an appointment is not received within a specified time. It is also essential to inform the patient of any suspicion of malignancy, together with any caveats if the diagnosis is uncertain. Investigations such as fluorescein angiography and systemic screening can cause unnecessary delays in the referral process and could be left to ocular oncologists.

DIAGNOSIS

Diagnosis of uveal tumors requires an awareness of the wide range of conditions and of the diverse clinical manifestations of each (Chapters 33 and 37).

PROGNOSTICATION

Tumor Staging

Tumor staging is fundamental to patient care, and uveal melanoma is no exception (Chapter 33). Unfortunately, unlike other cancers, the tumor, node, metastasis (TNM) staging system has not proved acceptable for uveal melanoma.¹ A variety of alternative systems based on clinical features such as largest basal tumor diameter, tumor thickness, extraocular extension, and ciliary body involvement have been devised (Chapter 46).

Box 39-1. Aspects of Management of Patients With Uveal Melanoma

- Detection of tumor
- Referral for specialist care
- Diagnosis and differential diagnosis
- Tumor staging, according to size and extent
- Tumor grading according to histology, cytogenetics, and molecular genetics
- Counseling, to inform on condition and therapeutic options
- Ocular treatment, if possible conserving function
- Systemic investigation, detecting metastatic spread as early as possible
- Long-term surveillance, to enable timely treatment of any complications
- Psychological support for patients and relatives

Tumor Grading

As mentioned in other chapters, uveal melanoma tends to fall into two distinct categories of low and high grade. These two varieties are more accurately distinguishable using cytogenetic and molecular genetic techniques rather than traditional histopathologic evaluation.²

TREATMENT

There is a growing acceptance of selecting between the various methods according to tumor size and location and of a multimodality approach wherein different modes of treatment are used to improve local control while minimizing collateral damage to other parts of the eye.

Episcleral Plaque Radiotherapy

In most centers, when applicable, the first choice of treatment is episcleral plaque radiotherapy, brachytherapy, administered with a radioactive plaque containing ruthenium-106 or iodine-125 (Chapter 41). Ruthenium plaques are suitable for uveal melanomas up to 5 mm thick, because of the limited range of β radiation they emit.