Hypersensitivity reactions to radiocontrast media (RCM) are unpredictable and are a concern for radiologists and cardiologists. Immediate hypersensitivity reactions manifest as anaphylaxis, and an allergic IgE-mediated mechanism has been continuously discussed for decades. Non-immediate reactions clinically are exanthemas resembling other drug-induced non-immediate hypersensitivities. During the past years, evidence is increasing that some of these reactions may be immunological. Repeated reactions after re-exposure, positive skin tests, and presence of specific IgE antibodies as well as positive basophil activation tests in some cases, and positive lymphocyte transformation or lymphocyte activation tests in others, indicate that a subgroup of both immediate and non-immediate reactions are of an allergic origin, although many questions remain unanswered. Recently reported cases highlight that pharmacological premedication is not safe to prevent RCM hypersensitivity in patients with previous severe reactions. These insights may have important consequences. A large multicenter study on the value of skin tests in RCM hypersensitivity concluded that skin testing is a useful tool for diagnosis of RCM allergy. It may have a role for the selection of a safe product in previous reactors, although confirmatory validation data is still scarce. In vitro tests to search for RCM-specific cell activation still are in development. In conclusion, recent data indicate that RCM
hypersensitivity may have an allergic mechanism and that allergological testing is useful and may indicate tolerability.