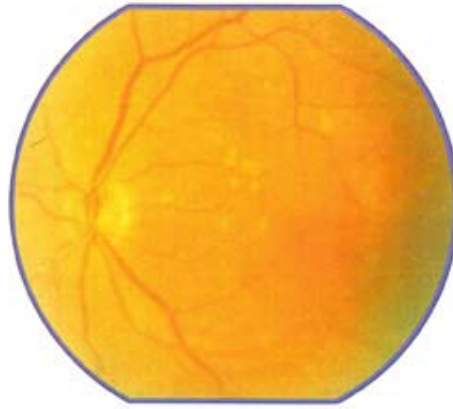


Non-exudative Macular Degeneration**18-1 DRUSEN****18-2****18-3**

18-1 Drusen are the earliest form of age-related macular degeneration. Drusen may be hard or nodular, soft or diffuse or cuticular. Risk factors for exudative maculopathy include confluency of drusen and retinal pigment epithelium hyperpigmentation. The first patient has hard drusen as well as larger soft or diffuse drusen, which are seen centrally in this case.

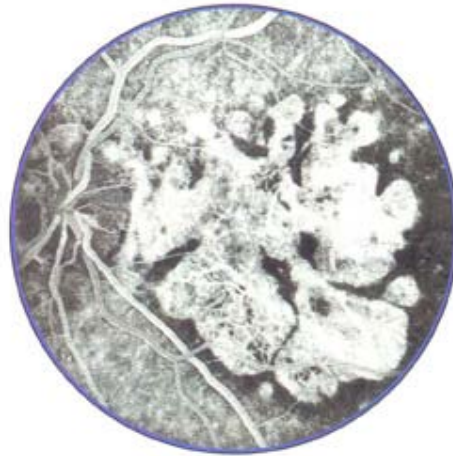
18-2 and 18-3 Mineralization of drusen can sometimes occur.

18-1, Courtesy of Mark Crowell.

18-4**18-5****18-6****18-7**

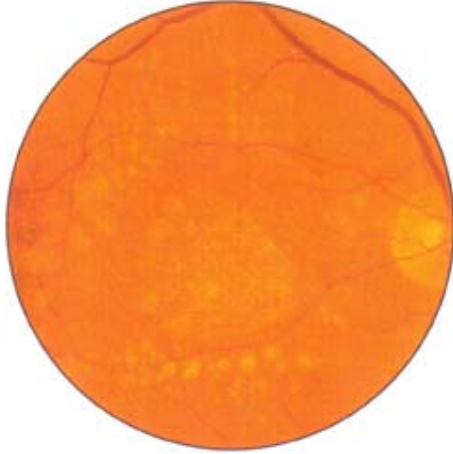
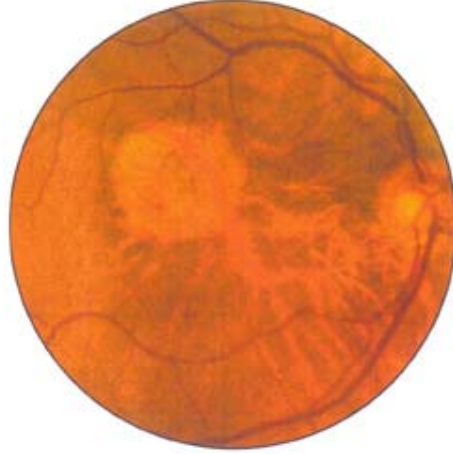
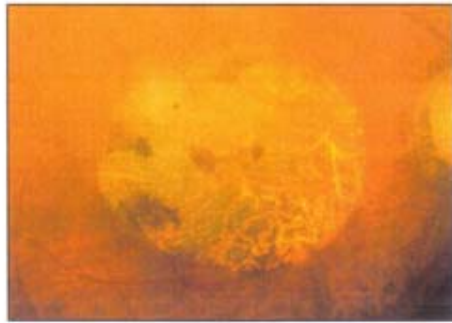
18-4 and 18-5 Drusen are usually bilateral and symmetric, however, in this case, marked asymmetry of the drusen can be appreciated when comparing the patient's two eyes.

18-6 and 18-7 Drusen can rarely disappear spontaneously as seen in this case. The second photograph shows the same eye approximately 2.5 years later.

18-16 GEOGRAPHIC ATROPHY**18-17**

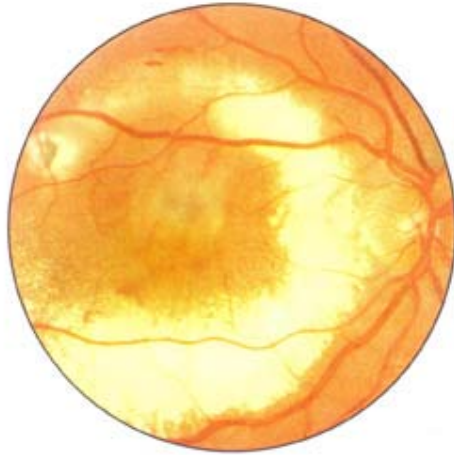
18-16 and 18-17 Atrophic, geographic, or areolar atrophy may be seen in the dry form of macular degeneration. Retinal pigment epithelial atrophy can be noted in these cases. Window defects are noted on the corresponding fluorescein angiogram.

18-16 and 18-17, Courtesy of Dr. Neil Bresler and the Wilmer Reading Center, copyright Wilmer Reading Center, 1994.

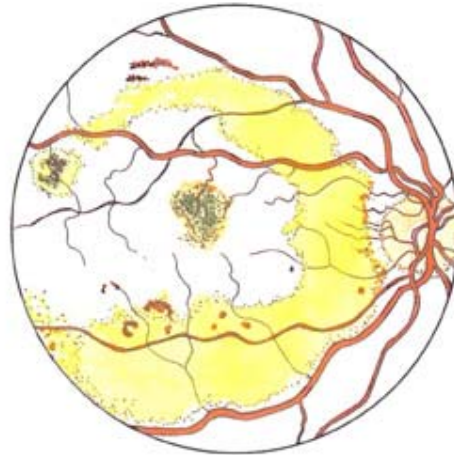
18-18**18-19****18-20****18-21**

18-18 through 18-21 Geographic atrophy can appear primarily as hypopigmentation with (18-18) or without (18-19) associated drusen or varying degrees of hyperpigmentation and metaplasia (18-21).

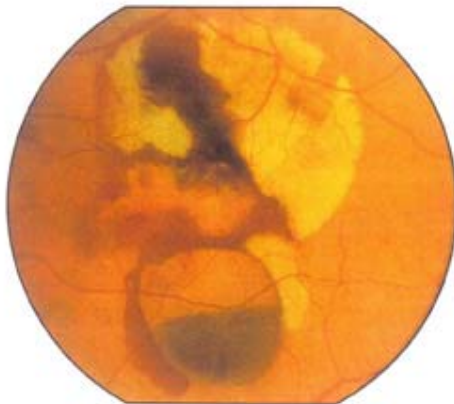
Exudative Macular Degeneration
18-27 CHOROIDAL NEOVASCULARIZATION



18-27A



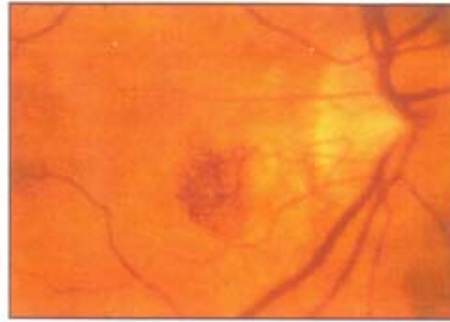
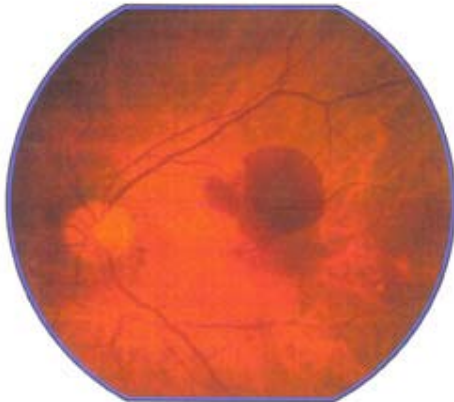
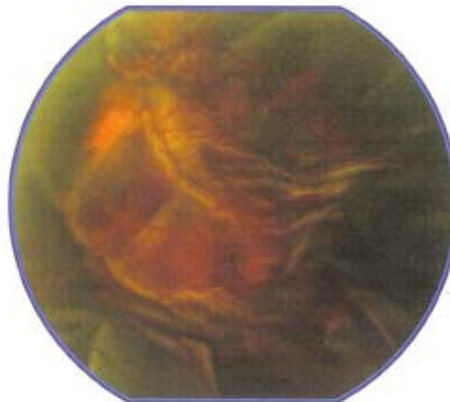
18-28



18-27 and 18-27A Exudative maculopathy is caused by choroidal neovascularization. A grayish-green choroidal neovascular membrane is seen (18-27). Early in the exudative process, subretinal fluid, hemorrhage and lipid appear secondary to the neovascularization.

18-28 Subretinal hemorrhage secondary to choroidal neovascularization is present in the next patient. A pigment epithelial detachment is noted inferiorly. Hemoglobinized and dehemoglobinized blood is present.

18-28, Courtesy of Mark Crowell.

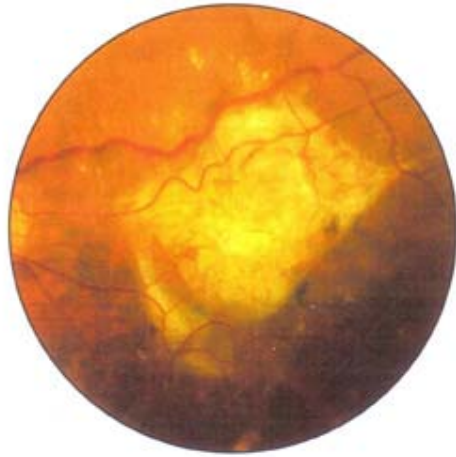
18-29 CHOROIDAL NEOVASCULARIZATION**18-30****18-31****18-32**

18-29 More extensive subretinal hemorrhage can also occur and give the appearance of a pseudomelanoma.

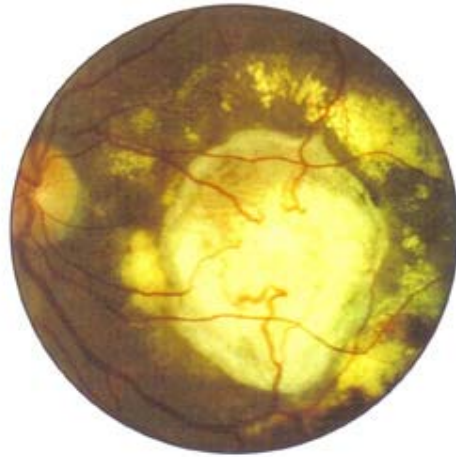
18-30 Rarely, "pure" choroidal neovascularization can occur without overlying exudation, as demonstrated in this case.

18-31 and 18-32 This patient had subretinal hemorrhage from subfoveal choroidal neovascularization (18-31), and 7 weeks later developed massive hemorrhagic exudation with bullous detachment (18-32). The fundus at this point has the appearance of a pseudomelanoma, but the earlier photograph showing subfoveal neovascularization was helpful in confirming the diagnosis of macular degeneration.

18-33 DISCIFORM SCARS



18-34



18-35



18-33 through 18-35 The end result of choroidal neovascularization is disciform scarring. Anastomosis between the retinal and choroidal circulations can sometimes be seen (18-34 and 18-35).