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Monitoring progression of retinitis pigmentosa: current recommendations and recent advances.

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**Introduction:** Retinitis pigmentosa (RP) is the most common form of inherited retinal degenerations with an estimated prevalence of 1 in 4,000 and more than 1 million individuals affected worldwide. With the introduction of the first retinal gene therapy in 2017 the importance of understanding the mechanisms of retinal degeneration and its natural progression has shifted from being of academic interest to being of pivotal for the development of new therapies.

**Areas covered:** This review covers standard and innovative diagnostic techniques and complementary examinations needed for the evaluation and treatment of RP. It includes chapters on the assessment of visual function, retinal morphology, and genotyping.

**Expert Opinion:** Monitoring the progression of RP can best be achieved by combining assessments of both visual function and morphology. Visual acuity testing using ETDRS charts should be complemented by low-luminance visual acuity and colour vision tests. Assessment of the visual field can also be useful in less advanced cases. In those with central RP involvement measuring retinal sensitivity using microperimetry is recommended. Retinal morphology is best assessed by OCT and autofluorescence. Genetic testing is pivotal as it contributes to the pathophysiological understanding and can guide clinical management as well as identify individuals that could benefit from retinal gene therapy.

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