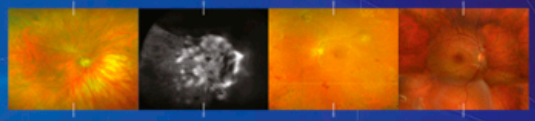

COST OF DIABETIC RETINOPATHY AND MACULAR OEDEMA IN A POPULATION. AN EIGHT-YEAR FOLLOW-UP

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Background. Prospective, population-based study of an 8-year follow up. To determine the direct cost of diabetic retinopathy [DR], evaluating our screening programme and the cost of treating DR, focusing on diabetic macular oedema [DMO] after anti-vascular endothelial growth factor [anti-VEGF] treatment. Methods. A total of 15396 diabetes mellitus [DM] patients were studied. We determined the cost-effectiveness of our screening programme against an annual programme by applying the Markov simulation model. We also compared the cost-effectiveness of anti-VEGF treatment to laser treatment for screened patients with DMO. Results: The cost of our 2.5-year screening programme was as follows: per patient with any-DR, €482.85±35.14; per sight-threatening diabetic retinopathy [STDR] patient, €1528.26±114.94; and €1826.98 ±108.26 per DMO patient. Comparatively, an annual screening programme would result in increases as follows: 0.77 in QALY per patient with any-DR and 0.6 and 0.44 per patient with STDR or DMO, respectively, with an incremental cost-effective ratio [ICER] of €1096.88 for any-DR, €4571.2 for STDR and €7443.28 per DMO patient. Regarding diagnosis and treatment, the mean annual total cost per patient with DMO was €777.09±49.45 for the laser treated group and €7153.62±212.15 for the anti-VEGF group, with a QALY gain of 0.21, the yearly mean cost was €7153.62±212.15 per patient, and the ICER was €30361. Conclusions: Screening for diabetic retinopathy every 2.5 years is cost-effective, but should be adjusted to a patient's personal risk factors. Treatment with anti-VEGF for DMO has increased costs, but the cost-utility increases to 0.21 QALY per patient.