Supplementary on line

French recommendations for CV, infection, cancer and osteoporotic fracture risks in rheumatoid arthritis.[1]

Cardiovascular disease

Cardiovascular risk should be assessed annually in line with EULAR recommendations and therefore lipid metabolism, blood sugar level and blood pressure should be investigated in every patient annually.[2]

In France, the target is LDL cholesterol and the objective depends on the other cardiovascular risk factors.[3] The risk factors taken into account are age (men aged fifty or over, women aged sixty or over), family history of early coronary disease, smoking (current or stopped in the last three years), permanent high blood pressure, whether treated or untreated, type 2 diabetes, whether treated or untreated, HDL cholesterol (<0.40 g/L (1 mmol/L) irrespective of gender, and if HDL cholesterol ≥0.60 g/L (1.5 mmol/L) subtract "one risk" from the risk level score. LDL-cholesterol concentrations should be less than 2.20 g/L (5.7 mmol/L) when there are no risk factors, 1.90 g/L (4.9 mmol/L) when there is one risk factor, 1.60 g/L (4.1 mmol/L) when there are two risk factors and 1.30 g/L (3.4 mmol/L) when there are more than two risk factors. RA is considered to be an additional risk factor in itself, as is recommended in France[4]. When the risk of cardiovascular events is $\geq$20%, LDL-cholesterol concentrations should be less than 1 g/L (2.6 mmol/L) [3]. Cardiovascular risk was evaluated using the Framingham equation and multiplied by 1.5 in line with EULAR recommendations when the RA had two of the following three characteristics: development for over ten years, rheumatoid factors, positive anti-CCP or extra-articular manifestations.[2,5]

In the study, personal history of cardiovascular disease was recorded, as was family history of coronary heart disease or early death. Diabetes was diagnosed if patients were receiving anti-diabetic treatment or had a fasting blood sugar level of more than 1.26 g/l before the inclusion visit. High blood pressure was diagnosed if patients were receiving antihypertensive treatment or if their blood pressure on the day of the consultation was more than 140/90 or more than 135/85 when the patient measured his/her own blood pressure. Smoking was recorded based on patient reports (never, current or previous). Current or previous smoking was recorded in pack-years.

Antiplatelet treatment is recommended in patients with a history of myocardial infarction, stroke, arteriopathy of the lower limbs, diabetic patients with creatinine clearance ≤60 ml/mn or microalbuminuria >300 mg/24 hours or at least two cardiovascular risk factors, or with a cardiovascular risk score calculated using the Framingham equation ≥20%.

Evaluation of renal function

In all RA patients, a creatinine test should be conducted annually as well as a proteinuria dipstick test.[1] When the proteinuria dipstick test is positive, a microalbuminuria test should be conducted. A nephrology consultation should be considered when creatinine clearance is <30 ml/mn or when microalbuminuria >300 mg/24 hours.[1]

Infections

As in the general population, it is recommended that all patients have an annual dental consultation.[1]

Vaccinations

An influenza vaccine is recommended annually and a pneumococcal vaccine every five years in RA patients.[6] Hepatitis A vaccination is recommended in subjects who live in care homes for children or young adults, patients infected with hepatitis B or C, hepatopathy patients and male homosexuals.[7] Hepatitis B vaccination is recommended in subjects who live in care homes for children or young adults, subjects in a psychiatric institution, patients likely to receive repeated transfusions (hemophilia, dialysis), patients awaiting transplant, subjects with close relatives infected by hepatitis B or having sexual relations with a subject with hepatitis B, subjects having sexual relations with multiple partners and drug addicts.[7] Meningococcal vaccination is recommended up to the age of 24.

Cancers

A patient was considered to be monitored optimally for cancer if age- and sex-appropriate cancer screening recommendations for the general population were followed. A male patient without known prostate cancer was considered to have been screened optimally for prostate cancer if a digital rectal examination and prostate specific antigen (PSA) level had been performed between the ages of 50 and 75 (or between the ages of 45 and 75 for patients of African ancestry or with at least two first-degree relatives who had prostate cancer). Subsequently, this evaluation had to have been repeated every three years for those with PSA <1 ng/mL and annually for

those with PSA between 1 and 4 ng/mL. For men with PSA >4 ng/mL, evaluation by an urologist was required to consider that the patient had been monitored optimally.[8] For breast cancer detection, a woman between the ages of 50 and 74 without known breast cancer was considered to have been screened optimally if a mammogram had been performed within two years of the study visit.[9] For uterine cancer detection, a woman between the ages of 25 and 65 without known uterine cancer was considered to have been monitored optimally if a Papanicolaou smear of the cervix had been performed within three years of the study visit.[10] For colon cancer screening, a patient over the age of fifty without known colon cancer was considered as optimally monitored if stools had been tested for occult blood every two years and a colonoscopy performed in the event of a positive result. For those patients at high risk of developing colon cancer (e.g. with inflammatory bowel disease or at least two first-degree relatives with colon or rectal cancer or at least one first-degree relative with adenomatous polyposis or Lynch syndrome), a colonoscopy had to have been performed within two years of the study visit for a patient to be considered optimally monitored.[1] For skin cancer detection, a patient was considered to be monitored optimally if he/she had been examined at least once by a dermatologist; if more than forty nevi were present, annual evaluation by a dermatologist was required for optimal monitoring. An annual visit to a dermatologist is required for every patient receiving immunosuppressant treatment.[1] For lung cancer screening, a patient was considered to have been monitored optimally if a chest radiograph had been performed after the onset of RA.[1]

Osteoporosis

Patients with a history of fractures (three fractures: vertebral, femoral or costal) must have been given anti-osteoporotic treatment. Osteoporosis in particular must have been investigated in patients with a BMI <19, corticosteroid therapy for over three months, early menopause or family history (father, mother) of fracture of the femur neck. All RA patients must have undergone osteodensitometry and vitamin D testing. In the event of vitamin D <30 mg/l, supplementation must have been given.[11] Lifestyle and dietary measures to combat osteoporosis include smoking cessation, alcohol intake limited to two units a day, regular physical activity (thirty minutes a day) and minimum calcium intake of 1.2 g/day.[10]

Réferences

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