MHRA Drug Safety Update

November 2019 part 1

MHRA Regulating Medicines and Medical Devices

Yellow fever vaccine: stronger precautions in people with weakened immunity and in those aged 60 years or older

The Commission on Human Medicines has issued a series of recommendations to strengthen measures to minimise risk with the yellow fever vaccine (Stamaril) following very rare fatal reactions. Key recommendations include new and updated contraindications and strengthened precautions to protect those with a weakened immune systems (including for people aged 60 years or older) and standardised risk-benefit evaluation procedures across UK yellow fever vaccination centres to ensure that people only receive the vaccine after a thorough risk assessment.

Yellow fever vaccine

For most people, the balance between the benefits and possible side effects of the vaccine remains overwhelmingly favourable. However, because the vaccine contains a live, weakened strain of the yellow fever virus, strict adherence to contraindications and precautions is essential to reduce the risk of serious side effects in those who may have a weaker immune system.

Very rare risks associated with yellow fever vaccine

Two risks unique to yellow fever vaccine are viscerotropic disease (YEL-AVD) and neurotropic disease (YEL-AND), which both resemble yellow fever infection. These are very rare but can be fatal. At vaccination all vaccinees should receive the manufacturer's patient information leaflet for Stamaril vaccine, which advises them on symptoms to be vigilant for following vaccination. These risks are more likely to occur in certain groups, particularly people with a weakened immune system, people without a thymus, and people aged 60 years or older. The risks of YEL-AND and YEL-AVD are estimated to be up to 1 per 100,000 primary vaccinees, although this may be up to 4-times greater in those aged 60 years or older.

Trigger for detailed review and recommendations

Recent fatal cases of YEL-AVD in the UK prompted the UK's Commission on Human Medicines (CHM) to convene an Expert Working Group in 2019 to consider the balance of benefits and risks of yellow fever vaccine, risk factors for serious adverse reactions, and the measures in place in the UK to minimise risks. The review concluded in October 2019, and CHM has now issued a set of updated recommendations to minimise risks to vaccinees. The recommendations are in addition to the full list of contraindications and precautions described in the current Summary of Product Characteristics and Patient Information Leaflet, which will be updated. Standardised pre-vaccination screening checklists are also being produced, along with a patient group direction template. A further communication will be issued once these documents are ready to ensure they can be implemented in clinical practice

The key recommendations of the review can be found in the letter from MHRA, PHE, NaTHNaC, and HPS, which was sent to vaccination clinics on 21 November 2019.

It should also be noted:

- Only healthcare professionals specifically trained in benefit-risk evaluation of yellow fever vaccine should administer the vaccine, following their individualised assessment of a person's travel itinerary and suitability to receive the vaccine.
- Every vaccinee should be advised to seek emergency medical attention if they develop signs or symptoms of very rare neurotropic disease (YEL-AND) or viscerotropic disease (YEL-AVD) and should receive the manufacturer's patient information leaflet as part of the travel consultation.