

DMARDs, Biologics and vaccinations

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Which drugs used to treat rheumatoid arthritis increase the risk of infection?

- Sulfasalazine, gold and hydroxychloroquine do not increase infection
- Cyclophosphamide
- MTX, leflunomide
- MMF /AZT
- TNF- α inhibitors
- Rituximab
- Tocilizumab
- Abatacept etc

Immunisation for people with rheumatoid arthritis

- Immunisation is an important issue for people with rheumatoid arthritis (RA)
- RA patients experience infections more frequently
- These infections tend to be more serious.
- Abnormal activity of the immune system
- Complication of treatment with some of the drugs

Who should not be immunised?

- Avoided during pregnancy
- Previous anaphylactic reaction to a vaccine or one of its components
- Those who have had a confirmed anaphylactic reaction to egg should not receive yellow fever or influenza vaccines
- patient on immunosuppressive treatment
- Severe latex allergy
- Infection – delay vaccine

Which immunisations should be avoided when taking drugs for rheumatoid arthritis?

- Live vaccines include measles, mumps, rubella, varicella (chicken pox/shingles) and yellow fever.
- BCG is a living, attenuated form of TB and this too should be avoided in people who are immunosuppressed.
- Immunization with live vaccines such as BCG should be delayed until 6 months of age in children born to mothers who received immunosuppressive biological therapy during pregnancy.

How long a gap should there be between starting/stopping a biologic drug and having a vaccine?

- People should not start a biologic drug within one month of being immunised with a live vaccine.
- Give a live vaccine six months after the biologic drug has been stopped
- Nasal spray flu vaccine is a live vaccine. Not recommended for JIA patients
- If they are in school , should not have live nasal vaccination but should have injectable flu vaccine 2 weeks prior to the start of whole vaccination programme in their school.
- All RA patients are advised to have flue vaccination about 2 weeks prior to their child going to get the vaccination in school –
- Nasal flu vaccine contain 4 strains and injectable contains 3 strains

Live vaccine and steroid treatment/Methotrexate/AZT/Leflunomide

- Must not give if they have received past 3 months
- Short term high dose (40mg /day for more than a week)
- Long term lower dose of steroid (> 20mg/d/>2 weeks)
- MTx > 25mg/week
- AZT 3mg/kg/day
- Cholestaramine wash out for leflunomide

Is immunisation effective if you are taking drugs for rheumatoid arthritis?

- The strength of the protective response may not be as great
- Most people generate a useful protective response
- On rituximab treatment , give flu vaccination either before or six months after an infusion.

Flu jab and pneumococcal vaccination

- Annual flu jab
- Pneumococcus vaccination
- Need pneumococcal vaccine to give before starting biologic treatment.
- Check antibody level and booster given before biologic treatment
- The pneumococcal vaccination and shingles vaccination once

Chickenpox and shingles

- Chicken pox vaccination given in childhood
- Immunoglobulin treatment considered if never had chicken pox or on immunosuppressive drugs and have had close contact with someone with chicken pox
- GP check level of varicella antibody in blood and if its low give Immunoglobulin treatment
- Prophylactic acyclovir
- From 2013, people aged between 70 and 79 will
- be offered the shingles vaccination.

Shingles vaccination

- Patients should NOT receive the vaccinations:
- biological therapies
- cyclophosphamide
- >10 mg per day of prednisolone
- >25 mg methotrexate/week
- >3 mg/kg/day azathioprine
- >1.5 mg/kg/day mercaptopurine

- Avoid vaccination if they:
- have other conditions causing severe immunosuppression (for example leukaemia, lymphoma, HIV/AIDS)
- have active TB
- pregnancy

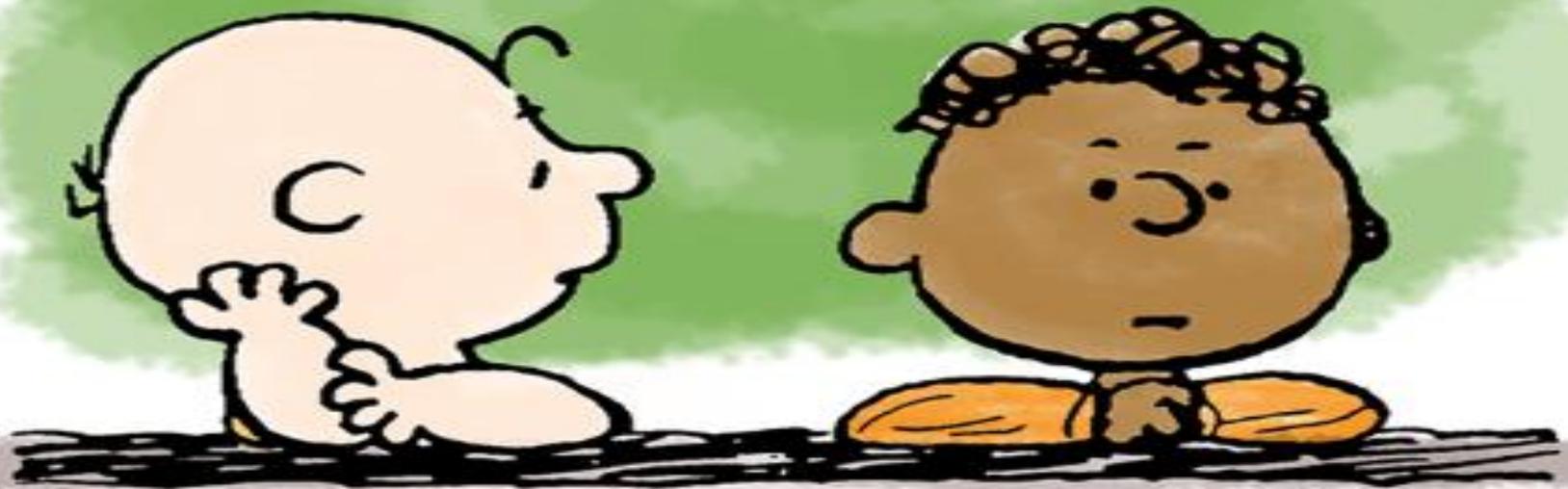
Yellow fever vaccine

- Live vaccine
- Not recommended in immunosuppressed patients
- Avoid Travelling to central Africa
- Certain countries need clearance certificate
- Certificate from GP or Tropical disease

References

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- Vaccination schedule and ages of administration: www.nhs.uk/Conditions/vaccinations
- online link: www.gov.uk/government/publications/green-book-the-complete-current-edition
- Travel vaccinations: www.nhs.uk/chq/pages/1072.aspx?categoryid=67&subcategoryid=152
- Flu vaccination: www.nhs.uk/Conditions/vaccinations/Pages/flu-influenza-vaccine
- Pneumococcal vaccination: www.nhs.uk/Conditions/vaccinations/Pages/pneumococcal-vaccination

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