Rabiës pre exposure prophylaxis in patients with auto-immune diseases using immunosuppressive agents.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25639

Source
Nationaal Trial Register

Brief title
VIPRAR

Health condition

Auto-immune diseases (Inflammatory bowel disease/rheumatoid arthritis)

Sponsors and support

Primary sponsor: The International Society of Travel Medicine (ISTM)
Source(s) of monetary or material Support: The International Society of Travel Medicine (ISTM)

Intervention

Outcome measures

Primary outcome

Boostability, defined as the proportion of patients who received a 3-dose PrEP schedule (0,7,28) and had adequate antibody levels >0.5 IU/L at day 7 after the 2-dose PEP schedule

(0,3) given 1 year after the PrEP schedule.

Secondary outcome

o Seroconversion rate (SCR) on day 28 (after 2 out of 3 doses PrEP), defined as the proportion of patients who developed adequate antibody levels >0.5 IU/ml on day 28.
o SCR on day 60 (after 3 out of 3 doses PrEP), defined as the proportion of patients who developed adequate antibody levels >0.5 IU/ml on day 60.
o Persisting immunity at month 12, defined as the proportion of patients who had adequate antibody levels >0.5 IU/ml at month 12.
o Factors associated with seroconversion on day 28, 60 and persisting immunity at month 12, such as age, gender, medication, comorbidities, smoking, alcohol and drug use.

Study description

Background summary

Rabies is a neglected disease with a case-fatality rate of almost 100% in humans who develop symptoms. In 99% of human rabies, transmission is due to the bite of a rabies-infected dog. Rabies is fully preventable through the administration of rabies vaccines and rabies immunoglobulins (RIG).
After a potential exposure to rabies in a healthy unvaccinated person, post exposure prophylaxis (PEP) treatment consists of four rabies immunizations and RIG. By contrast, healthy persons who previously received rabies pre-exposure prophylaxis (PrEP) can suffice with a shortened PEP schedule, consisting of only two vaccinations without RIG.
For ICPs however, there are insufficient data on immunogenicity and boostability of this PrEP schedule. The recommended PrEP schedule for ICPs currently consists of three doses of rabies vaccine (days 0, 7, 21-28). For ICPs, however, adequately administered PreP does not preclude the need for RIG after a potential rabies exposure. Therefore, rabies PrEP currently does not benefit ICP travelers as much as healthy travelers. The goal of this study is to investigate the immune response after 3 doses of rabies vaccine (PrEP; day 0,7,21-28) and boostability 1 year after PrEP by admnistering 2 doses rabies vaccine (PEP; year 1 and year 1+3 days) in patients with auto-immune diseases using TNF-alpha inhibitor or DMARD monotherapy. Antibody levels will be measured by The Rapid Focus Fluorescent Inhibition Test (RFFIT).
Antibody levels above 0.5IU/L will be considered as adequate according to WHO definitions.

Study objective

Rabies vaccine is very immunogenic in healthy people. The WHO considers a post-vaccination antibody titer of at minimum 0.5 IU/ml as adequate cut-off for successful vaccination. Case reports show adequate rabies antibody responses (RAR) after vaccination in ICPs using immunosuppressive therapy.
We hypothesize that in patients with auto-inflammatory diseases treated with

immunosuppressive monotherapy, the immunogenicity and boostability following a 3-dose PrEP schedule is sufficient to safely recommend a shortened PEP schedule without RIG, following potential rabies exposure.

Study design

Day 0, day 7, day 21-28, day 60, month 12, month 12+3 and month 12+ 7

Intervention

We offer all eligible ICPs a three-dose rabies PrEP schedule on days 0, 7 and 21-28 intramuscularly, according to the current WHO guidelines for ICPs.
At month 12, a 2-dose rabies PEP schedule will be administered intramuscularly at day 0 and day 3. Serum samples will be taken on day 0, day 28, day 60, month 12 and month 12+ 7 days to determine rabies antibody levels.
The Rapid Focus Fluorescent Inhibition Test (RFFIT) is considered the gold standard to determine rabies antibodies. All blood samples will be sent to an external rabies reference center for RFFIT. Antibody levels above 0.5IU/L will be considered as adequate according to WHO definitions.

Contacts

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Eligibility criteria

Inclusion criteria

• Adults aged 18-70 years old with a chronic inflammatory condition requiring treatment with one of the following drugs: adalimumab, infliximab, etanercept, golimumab, certolizumab, methotrexate, azathioprine, 6-mercaptopurine, thioguanine, steroids, tacrolimus or mycophenolic acid.

• Being naïve to rabies vaccines
• Anticipated travel to a rabies-endemic country in the future

Exclusion criteria

• Diagnosis of one of the following
o Primary immune deficiency disorder
o Active malignancy
o Anyone who received chemotherapy or anti-CD20 in the past 2 years.
o Hemophilic disorder precluding intramuscular vaccination
o (Functional) asplenia
o Allergy to any of the components of the rabies vaccine.
• Pregnant
• Not able or willing to consent
• Using other immunosuppressive agents than the mentioned

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-06-2020
Enrollment:	50
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	02-12-2020
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL9087
Other	METC AMC (Amsterdam UMC, Location AMC) : METC2018_108

Study results