TAISTEAL

Travel Medicine Society of Ireland

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NEWSLETTER

ed. C. Maguire

WELCOME TO THE SPRING EDITION OF TAISTEAL

Dear Colleagues.

Welcome to the spring edition of Taisteal. In our northerly climes, springtime is bringing a welcome increase in daylight hours and renewal of growth of flora and fauna.

It is also a time when people begin to consider their travel plans for the summer and autumn and it is likely that those who provide travel medicine services will begin to see an increased demand for travel advice and vaccinations.

Travel related illness is an increasingly important part of the day-to-day practice of clinicians and whilst some travellers ensure they consult for advice before they travel, it is not uncommon for travellers to return seeking assistance for an illness acquired abroad.

Our AGM will take place in Dublin on April 25th 2015 and we look forward to welcoming our guest speaker Dr. Alex Grieve. I have had the pleasure of being educated and entertained by Dr. Grieve in the past and I know that our members will enjoy his presentation.

April 25th is also the WHO designated World Malaria Day and malaria is once again in the news, in particular with the release of data on imported malaria by the Health Protection Surveillance Centre (HSPC). Their recently published data shows that there were 80 reported cases of imported malaria to Ireland in 2014. This represented a 13% increase over 2013 figures and once again the majority of cases are *falciparum* species malaria (74%), imported predominantly from West Africa.

By far the largest group at risk of malaria are immigrant groups, particularly from West Africa, returning home to visit friends and relatives. Business travellers are the second most likely group to be diagnosed with malaria on their return. Interestingly, of those who became ill from malaria on their return to Ireland and declared a reason for travel, only 1 out of 80 cases reported that they had been on holiday. Males outnumber females 2.2:1; those between the ages of 35 and 54 appear to be most at risk.

Ireland has an incidence of imported malaria of 1.74 cases/100,000 population which is the third highest in Europe after the United Kingdom and Belgium.

It is known that those groups at greatest risk of acquiring malaria on their travels (VFR—Visiting Friends and Relatives) are less likely to attend for travel advice in advance of travel than business travellers and those going on vacation. They are also less likely to take effective malaria chemoprophylaxis than business or holiday travellers.

Knowing that malaria high-risk travellers may be less likely to attend for specific pre travel consultations, we need to be vigilant and creative in how we engage with and educate these groups.

Using a couple of minutes during a routine consultation such as for childhood immunisations to discuss travel health risks may be a worthwhile intervention. Opportunistic malaria prevention advice advocating Awareness, Bite prevention, Chemoprophylaxis, Diagnostic testing (ABCD) at the time of routine non-travel related consultations may be worthwhile to increase the awareness of malaria among at the highest risk group of immigrants.

The malaria data from the HSPC is clear and reinforcing the message about malaria among the highest risk groups is now more important than ever. It is also important to remember that an ill patient may not automatically report recent travel. That single question about recent travel during a consultation can literally be a lifesaver.

Dr. John Gibbons
President TMSI

THE EMERGING THREAT OF CHIKUNGUNYA

Chikungunya is an Arbovirus, member of the Flavivirus family which includes Dengue, JEV, Yellow Fever and West Nile disease and many others. The virus is transmitted by the Aedes mosquito which also transmits Dengue. It has made headlines for all the wrong reasons. This acute viral illness was first recorded in Africa in 1953. It takes it name from local dialect for "doubled over", an apt description of the stooped posture of victims, bent over and racked with pain. The virus has steadily spread East to India and Asia. In 2004 there was a large outbreak in Reunion, almost half of the population of this French island in the Indian ocean was affected. In December 2013 the first case was recorded in St Martens. The virus has now spread throughout the Caribean, Central America as far north as Florida and all the way south to Bolivia. Chikungunya has now completed it's bid for global domination!

The spread is Human-Vector-Human. There is no intermediate host reservoir such as pigs for Dengue or monkeys for Yellow Fever. The vector is *Aedes aegypti* and *Aedes aldopictus*, the so-called "tiger mosquito" which is also spreading world-wide. The virus replicates in mosquitoes as well as humans. Maternal foetal transmission ocurs during labour, but not thought to infect in utero or while breast-feeding.

Disease follows travel to endemic area within 14 days. Incubation is one to twelve days, average four to seven. The acute stage can last three weeks, Viraemia lasts five to seven days after development of clinical illness. 80% of those infected develop clinical symptoms, consisting of fever, aches and pains in joints, typically hands, wrists and ankles. Macular-papular rash, pruritus, facial oedema, lympadenopathy, epistaxis (rare in adults), lethargy and loss of appetite are also seen. The rash is easily distinguished from Measles as Cikungunya causes rash below the knees and elbows as in the pictures shown. Note the blanching and oedema caused by finger pressure on the affected baby. Mortality is similar to influenza: less 0.1%, mostly in extremes of age and patients with co-morbidity, diabetes, COPD, ischaemic heart disease etc.

Paracetamol is the best treatment. The joint pains are intense and many patients have overdosed in an attempt to get relief. Aspirin is contraindicated in first 14 days because of the risk of Reye's Syndrome. Opiates, tramadol or codeine are preferable for add-on relief. Fluids, rest and support are essential. Patients should be monitored for risk of complications of heart disease, diabetes, bronchitis, thromboembolism and hepatitis. Remove rings, avoid joint stress and overuse. Patients should be given extended sick leave as joint strain can lead to long term arthropathy. If the victim is pregnant, it is better for the child if the mother is not viraemic during delivery as infection will occur with blood contact. Tocolytics are used to delay labour and there is no reduction in foetal-maternal transmission by opting for Caesarean section over vaginal delivery.

Diagnosis is confirmed by blood PCR in days 0 to 5; anti-chikungunya IgM antibodies appear after day 5 and IgG after day 7. Previous infection with Dengue and previous vaccination against Yellow Fever can cause a false positive anti IgG test.

The post-acute stage is from 3 weeks to 3 months post infection. Painful joints and tendons, severe lethargy and loss of joint function are common. The risk of severe post-acute disease is more prevalent in the over 40s, females and those with pre-existing arthritis, high initial fever and six or more joints involved.

Treatment: analgesia, physiotherapy, psychological and work support. Steroids can be used in severe cases, but only low dose, short courses. DMARD eg methotrexate, can be considered after 8 weeks.

The third stage is the chronic stage, which can occur after four months. Specialist Rheumatology treatment is advised because there are three possible outcomes:

- Spontaneous resolution,
- Prolonged joint pain, six years has been recorded,
- Progressive joint deterioration.

The patient should be investigated and treated as any new case of polyarthropathy/arthritis.

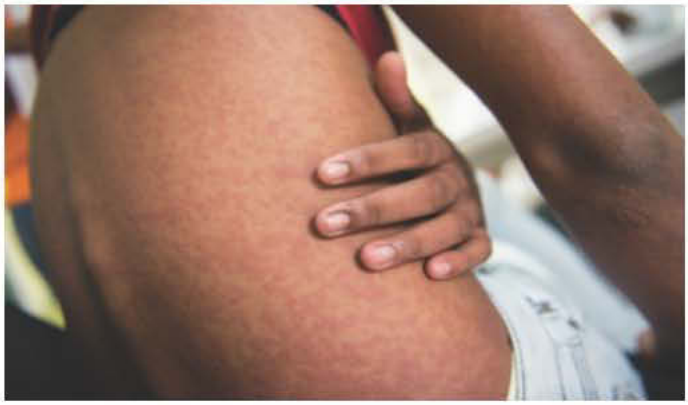
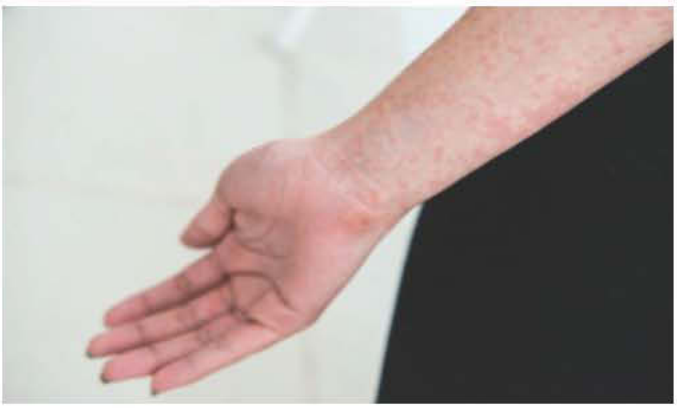
Chikungunya is likely to grow and spread and become a major cause of joint morbidity in the future. The virus has already spread to the Mediteranean region and French Rheumatology services are gearing up for the challenge. This virus will, in a few short years, become a significant cause of inflammatory arthritis. Unfortunately, there is no vaccine in the pipeline and no specific treatment. The only prevention is bite avoidance and control of the mosquito vector. It is only a matter of time before Chikungunya becomes endemic in more parts of the globe but for now, travel health practitioners need to be aware of the fluctuating risks in various destinations and give appropiate advice to travellers.

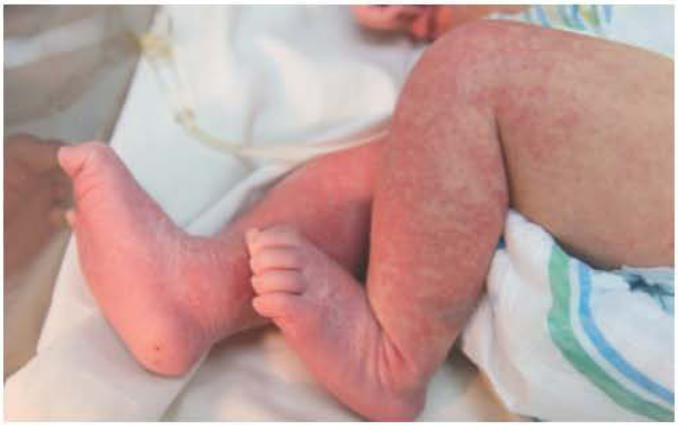
References:

PanAmerican Health Organisation on www.paho.org (shows outbreak areas).
Centers for Disease Control on cdc.gov
Medscape (case study on diagnosis and treatment)
Report of French Government taskforce on Chikungunya,
http://www.infectiologie.com/site/medias/Recos/2014-Chikungunya-recommandations.pdf

Dr. C. Maguire

CHIKUNGUNYA



Arbovirus, Flavivirus (Dengue, JEV, Yellow Fever) Human-Vector-Human.
Aedes aldopictus, Aedes aegypti transmit Dengue and Chikungunya, replicates in mosquito.
Maternal transmission during labour, not breast-feeding.
Travel to endemic area within 14 days.
Incubation 1 to 12 days, average 4 to 7.
Prevention A B c D

1. **Acute Stage:** day 1 to 21. Viraemia lasts 5 to 7 days after development of clinical illness.
80% have clinical symptoms. Fever, Aches & Pains in joints : hands wrists, ankles.
Macular-papular rash, pruritus, facial oedema, lympadenopathy, epistaxis (rare in adults), lethargy loss of appetite.
Mortality similar to flu, less 0.1%, extremes of age and co-morbidity.

Treatment: paracetamol (beware OD),
Aspirin is contraindicated in first 14 days, risk of Reye's Syndrome.
Fluids and support, risk of complications of IHD, DM, COPD, Thromboembolism, Hepatitis,
Opiates, tramadol, codeine. Rest! Remove rings, avoid joint stress/overuse.

Diagnosis: day 0 to 5, PCR; 5 to 7. PCR+IgM; after day 7, IgG;

Pregnancy: delay delivery, blood transmission, neonate monitoring. LSCS vs SVD.

2. **Post-Acute Stage:** 3 weeks to 3 months.
Risks are: Over 40s, F>M high initial fever and 6 or more joints involved, pre-existing arthritis.
Painful joints, tendon, lethargy, loss of function
Treatment: analgesia, physiotherapy, psychological and work support.
Steroids in severe cases, low dose short course.
DMARD eg methotrexate, can be considered after 8 weeks.

3. **Chronic Stage:** after 4 months. Specialist Rheumatology.
- Spontaneous resolution,
- Prolonged joint pain,
- Progressive joint deterioration.

Investigate and treat as polyarthropathy/arthritis

C. Maguire

RABIES:
HOW TO ADVISE ON WHETHER PRE-TRIP VACCINATION IS WORTHWHILE AND DEALING WITH PATIENTS WHO HAVE BEEN POTENTIALLY EXPOSED.

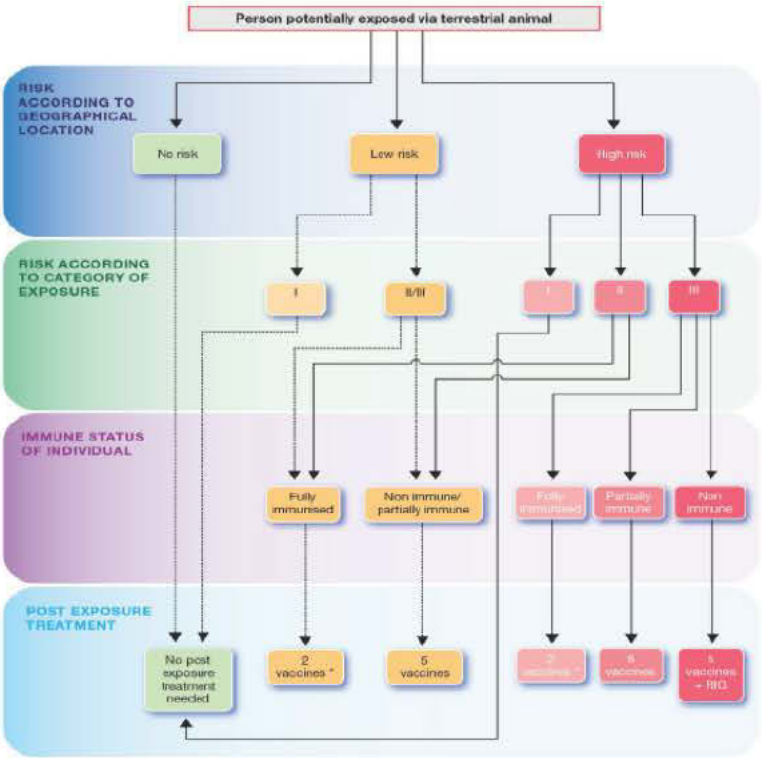
Dogs account for more rabies risk episodes than other mammals. Monkeys, cats and bats also act as vectors. (pic: M. Dominguez)

"Do I need to get Rabies vaccine?" is a question commonly asked by patients in the pre-travel consultation. The only time I think it is possible to answer with a definitive 'no' is if the destination is rabies-free. A useful online country risk list from Public Health England can be consulted at this link: https://www.gov.uk/government/publications/rabies-risks-by-country/rabies-risks-in-terrestrial-animals-by-country

Most countries do have a theoretical Rabies risk and if the patient is on the receiving end of a bite/scratch/lick to mucous membranes from a mammal, then the bite should usually be managed as a potentially Rabies-prone one.

A user-friendly flowchart on how to assess the need for post-bite treatment is available in the recently updated Public Health England post-exposure guidelines, available online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/402386/Rabies_PHE_guidelines_on_postexposure_treatment_January_2015.pdf (p.18) and it is reproduced here:

Summary of Risk Assessment Treatment following exposure to terrestrial animals



* If last dose of vaccine was more than 10 years ago, arrange antibody test 1 week after 2nd vaccine

The real problem arises in patients who have not received previous Rabies vaccine and where a category III (transdermal) bite has occurred – such patients require antidote (Rabies Immune Globulin; RIG) injected into the wound. In addition, a course of vaccine shots needs to be given over the following month. RIG is difficult to obtain overseas and is often manufactured from an equine (rather than human) source, leading to post-treatment serum sickness in some patients. RIG treatment should be initiated as soon as possible and in the case of bites to the neck/head, within 12 hours – this is quite a challenge if the patient is in parts of South America or Africa, where distances are very large and internal flights can be infrequent.

By contrast, patients who have been given a full course of pre-trip Rabies vaccine ('Fully immunised') in the table above, are exempted from the requirement to receive RIG post-incident.

Patients often ask if Rabies is common at a particular destination. An understanding of Rabies leads to the realisation that this is the wrong question to be asking. Rabies is either absent or present; if it is present, even if uncommon, then because of the lethality of the disease on the occasions where it does arise, all relevant animal contacts are going to have to be managed as theoretical Rabies exposure and managed accordingly.

Knowing this, the question then becomes "what is the chance of an animal bite/scratch occurring that is going to have to be managed as a potential Rabies risk?" A study in 2010-11 questioned over 7,600 visitors departing Thailand and established a monthly risk of animal bite/scratch of 1:90. Worryingly, of those who were bitten, less than 40% sought post-exposure Rabies treatment; the chance of developing Rabies from an individual bite incident may be very small, but established Rabies is 100% lethal (about double the mortality of the current Ebola outbreak). Conversely, patients who do seek and receive correct post-exposure treatment seem to uniformly go on not to develop Rabies.

The main advantage of vaccine is that it exempts the patient from having to obtain RIG in the event of a risk incident. Two secondary advantages are that it allows more time for post-exposure top-up vaccine shots to be administered and provides cover for at least 10 years in the average traveller.

The main disadvantages of pre-travel vaccination are the cost (a minimum of €100 for a course), that it has to be administered on three occasions with minimum intervals between the shots and that it cannot be given in less than a 21 day period.

My advice to patients on how to manage a potential exposure is to rinse the wound thoroughly and to e-mail me the same day so that I can remain in touch with them and ensure that the correct medical follow-up is being carried out locally. I do this because of a number of experiences where patients who had not been vaccinated with Rabies vaccine pre-travel experienced a bite and were then given vaccine only (often on one occasion only) overseas and told that their treatment was complete.

If a patient presents to you in Ireland, post-holiday, with a history of possible recent exposure abroad and wondering if anything further needs to be done, then advice is available from the only centre carrying RIG in Ireland, at Cherry Orchard Hospital in Dublin. More details on this are available in chapter 18 of the Immunisation Guidelines for Ireland: http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter18.pdf

"Do I need Rabies vaccine?" – the arguments in favour of the patient having it are stronger if

(a) The patient has at least 21 days in which to have a full pre-trip course done
(b) They can afford the cost of pre-travel vaccination
(c) They are likely to be in such a remote place that post-exposure RIG will be unobtainable for days (remote treks, parts of Africa)
(d) They are likely to travel a lot in coming 10 years (thereby getting 'value' out of their protection.

Regardless of whether patients decide to be vaccinated pre-trip, I think the most important messages for them to understand are:

1. Leave the animals alone
2. If you are on the receiving end of a bite/scratch, get in touch with your Travel Medicine practitioner at home so that they can be sure that they are being given the correct post-exposure treatment.

Useful online resources:

Rabies risk by country: https://www.gov.uk/government/publications/rabies-risks-by-country/rabies-risks-in-terrestrial-animals-by-country

More detailed guidance on to assess post-bite Rabies risk (Public Health England): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/402386/Rabies_PHE_guidelines_on_postexposure_treatment_

References:

Piyaphanee W et al. Risk of Potentially Rabid Animal Exposure among Foreign Travelers in Southeast Asia. PLOS Neglected Tropical Diseases Sept 2012 Vol 6 Issue 9 e1852/

Malerczyk C et al. Imported Human Rabies Cases in Europe, the United States, and Japan, 1990 to 2010 J Travel Med 2011 (18); 6: 402 – 407.

Dr. Simon Collins FFTM RCPS (Glasg)

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SOUTH EAST ASIA

Undoubtedly over the next few months travel vaccination clinics across Ireland will see the annual upsurge in 20 something patients travelling to South East Asia. A large majority of these patients will be students and as such, one of their main concerns can be surrounding the price of vaccinations.

Vaccinations

For most short-term travellers the usual recommended vaccinations for South East Asia include cover against the childhood diseases (Tetanus and Diphtheria, Measles, Mumps and Rubella) as well as cover against the food and water borne diseases of Typhoid and Hepatitis A. For those trekking in the countryside or staying for longer periods then cover against Hepatitis B, Rabies and, in some cases, Japanese B Encephalitis should be considered.

Most standard tourists should start their vaccines about 6 weeks before they leave Ireland.

Food and Water Borne Diseases

Like many other countries throughout the world, there is a huge variety of standards in the preparation of food in many of the South East Asian countries. In many of the major cities, one cannot fault the food preparation and storage but it is wise to make travellers aware of some of the common pitfalls and so help to protect themselves during their holiday.

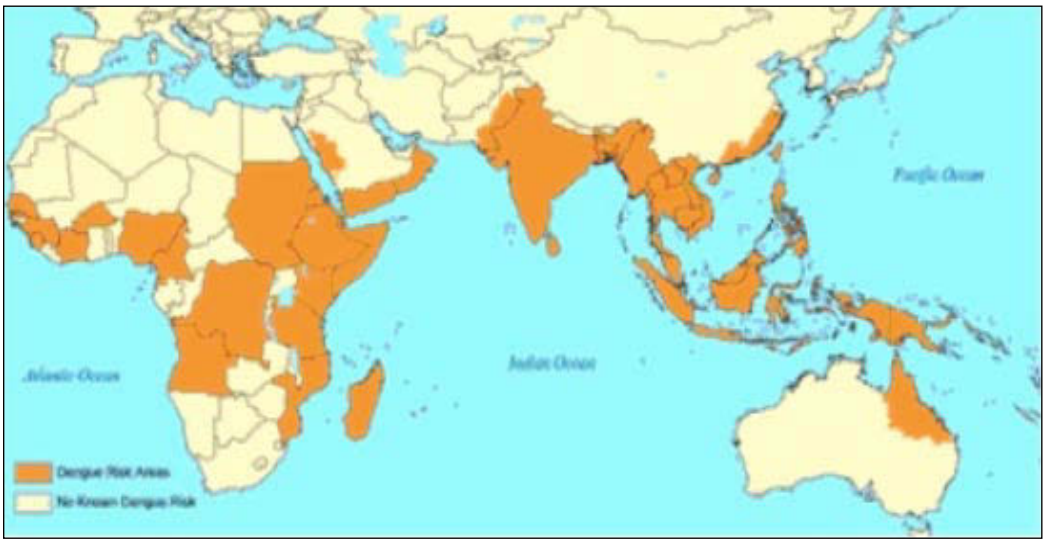
In most areas it should be advised to avoid cold meals and try to mainly eat hot food. Travellers should be especially careful of salads and other cold foods. It is thought that the incidence of amoebiasis in Thailand might be close to 8.5 per 100,000. This is a high figure. Obviously eating food from street vendors is foolhardy and commonly a source of illness. If travellers wish to buy fruit from street markets, they should make sure that they are able to peel the material themselves and so the inner contents will remain sterile.

Insect Borne Diseases

Malaria and many other illnesses are spread through the bite of the female mosquito. The major cities and most of the main tourist destinations of South East Asia are malaria free but travellers may still be bitten by mosquitoes, especially at dawn and dusk. There are other mosquito borne diseases that can be transmitted in these regions including Dengue and Japanese B Encephalitis.

Dengue Fever is transmitted to humans through the bite of the mosquito. In most cases the mosquitoes which transmit Dengue tend to bite during the daytime. This is different to the normal biting habits of many other mosquitoes which prefer to bite at the cooler times of the day. They also are easily found in major urban centres and so those staying in cities may also be at risk. No vaccine is available against Dengue Fever and so the main form of defence rests in protection against mosquito bites. Below are some tips which travellers should follow to reduce the risk of insect bites;

- Avoid dark coloured clothing, as they tend to attract mosquitoes. Wear light coloured clothes if possible.
- Use insect repellents to dissuade mosquitoes from alighting on exposed skin. Usually ones with a high content of diethyltolumide (DEET 30% - 50%) are the most effective.
- Although insect repellents are usually effective, travellers may need to wear long sleeved clothing to cover their arms and longer dresses or trousers for protection of their legs if the insects are still biting.
- Don't use perfumes or aftershaves, especially in the evening time as these seem to attract mosquitoes and other biting insects.
- Securely close any screens on doors and windows before dusk.
- Try not to scratch bites. This is usually how they become infected. Rubbing gently will have the same soothing effect but lead to less trouble.



General Advice

It is very important to leave enough time in the consultation to discuss general travel and health advice, as many of these younger travellers may be naive to the dangers of travel in South East Asia. Common sense and care is needed at all times to ensure a good safe holiday, below is some advice which should be shared with each traveller:

- It is essential to ensure that the traveller's personal health will be sufficient for the trip they have planned. If they have a significant medical condition (eg heart problems, diabetes, epilepsy, asthma etc) then it will be important to talk this through in great detail to make sure they are not taking unnecessary risks.
- Many backpackers will rest during the day and 'party' throughout the evening hours. Ask around and then choose clubs frequented by other backpackers. Travellers should be reminded to watch their belongings and particularly their drinks. Many travellers tell of having suffered serious consequences (eg robbery and rape) after being given a 'spiked' drink.

- Dehydration and loss of salt through perspiration are two other common problems for the unprepared traveller. Drink plenty of fluids and replace salt loss. Advise travellers to make sure they pack clothing, suitable for a warm humid climate, and oral rehydration salts.

- Watch belongings at all times. Don't carry any item that is of sentimental value. Don't flaunt any personal wealth. Never carry any items for another person and it would be advised, especially if travellers have not had their belongings with them at all times, carry out a very careful check before travel through any custom checkpoint.

- Sexually transmitted infections are common so avoid unsafe sex.

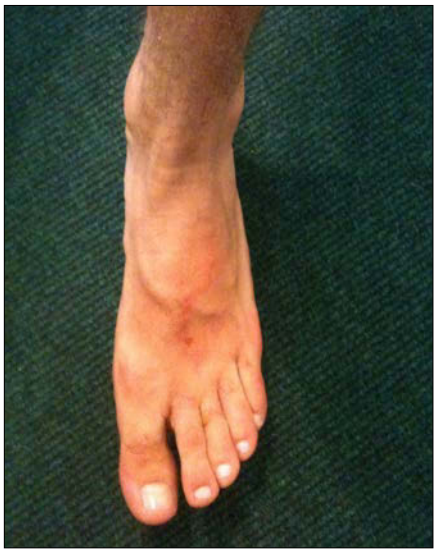
- Rabies is not a common problem for the tourist but it does certainly occur, especially in Thailand. Don't go near any warm blooded animals, especially dogs. Cats and monkeys are also involved in tourist bites. Wash any bite or lick immediately and go for urgent medical attention.

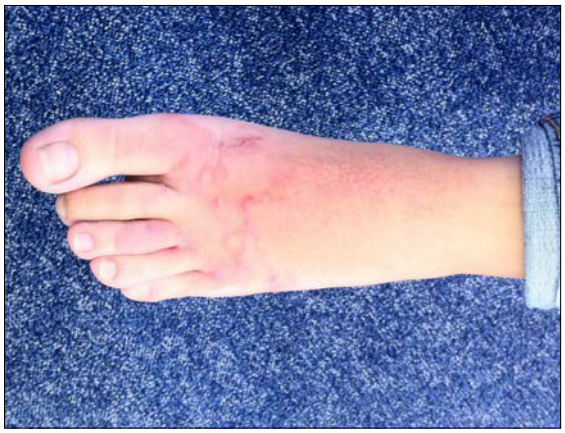
- It is important have a good basic travel plan and, where possible, stick with the itinerary. Any change may invalidate the healthcare advice given before leaving home (or travel insurance) so be careful.

Post Travel Care

Creeping Larva Migrans is a parasitic infection that creeps across the skin. The disease occurs following contact with animal faeces - typically unseen but hidden on the beaches in many of the hotter tropical regions of the world. The animal hookworm gets under the human skin (typically on the feet) by mistake and then spends a few weeks trying to find the exit point as it weaves an uncomfortable and itchy path across just under the skin. The infection will not pass deeper into the body of the human but it is regularly misdiagnosed as a type of 'fungal infection' and often inappropriate treatment is given. We regularly see this condition in travellers returning from the beaches of Central America, the Caribbean islands and South East Asia. It also occurs in Africa. Wearing flip-flops or sandals and lying on towels lessens the risk.

There are a number of ways to treat this condition. Various drugs taken by mouth can be useful including Albendazole and Ivermectin. However in our experience the majority of patients respond very well to topical application of either Thiabendazole or Albendazole. This lotion has to be applied regularly for enough to be absorbed through the skin to kill the parasite. Generally we advise patients to bathe the infected area in hot water (to increase absorption of the lotion) and then to apply it liberally twice throughout the day and mainly at nighttime. Within 24 to 48 hours you would expect an improvement in the level of discomfort though the rash itself can last for significantly longer. Repeat applications may be required before the final resolution is reached.





Nr. S. Grehan, TMB

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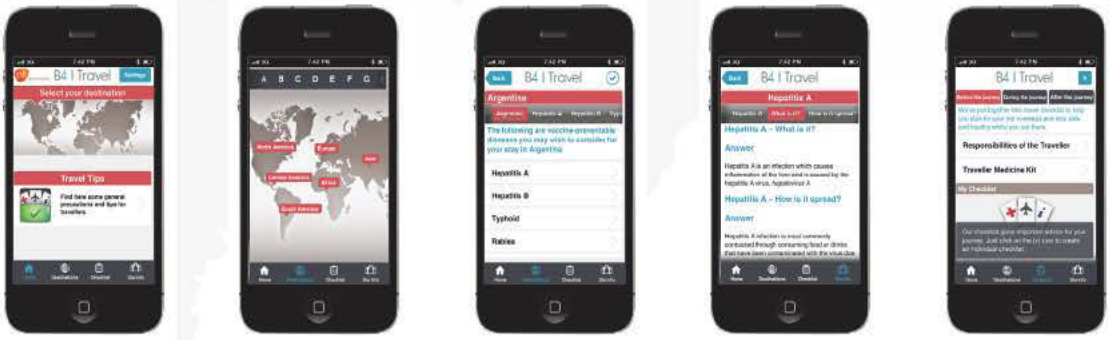

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IE/VAC/0009(a)/12(1) Date of preparation: June 2014

FOCUS ON: TICK BORNE ENCEPHALITIS

Spring has arrived in Northern Europe and as the cold embrace of winter disappears, grasslands and forests are once again in bloom.

Outdoor adventure activities are increasingly popular for tourists and day trippers and we need to be mindful of seasonal health risks they may encounter.

Tick borne encephalitis is a viral infection of the central nervous system, which causes inflammation of the meninges, brain parenchyma or spinal cord leading to meningitis and meningo-encephalitis in some cases. It can be responsible for chronic neurological sequelae and mortality rates are variable.

Tick borne encephalitis is causes by a virus of the Flaviviridae family (TBEV). The vector and reservoir for infection are ticks of the Ixodes family. These commonly attach themselves to the undersides of long grasses and fall off when disturbed by walkers. The ticks attach themselves to bare skin and can transmit TBEV to animals including humans.

Closeup of Ixodes Tick

Many hosts exist including ruminants, rodents and birds. Rodents are probably the most important hosts of the virus in the wild.

TBEV may also be transmitted by the consumption of unpasteurized milk products from infected animals—including goats.

TBEV infections are an emerging zoonosis and the incidence has increased significantly in the past 4 decades. The distribution of risk extends from Western Europe eastwards to eastern Russia, Siberia, China and Japan.

There are 3 recognized subtypes of TBEV

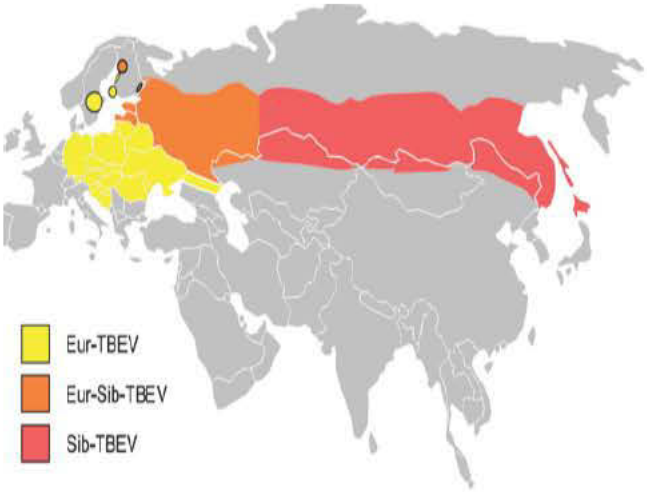
Western/European---extending from Western Europe to Russia.

Siberian-----Siberia, Eastern Russia and Finland.

Far Eastern----far Eastern Russia, China & Japan.

Some geographical overlap subtypes of subtypes may occur.

Reported rates of infection vary from approximately 3000 cases annually in Europe and 7500 cases in Russia. It is likely that significant under-reporting occurs.
These subtypes result in human infections with varying presentations and severity of outcomes.



Distribution of TBEV infections

SIGNS AND SYMPTOMS

Presentation varies with TBEV subtype. Morbidity and risk of mortality varies with age, older subjects have higher mortality rates.

Mortality Rates:

- Western subtype: 1-2%
- Siberian subtype: 2-3%
- Far Eastern subtype: 20-30%

Western TBEV may present in a biphasic mode with initial flu-like symptoms of headache, fever, rigors and muscle pains. This usually lasts for 2-8 days. An asymptomatic phase of 2-10 days may follow and in 20-30% of cases a second phase with evidence of meningo-encephalitis may follow. Signs of meningeal involvement and encephalitis may yield signs consistent with meningitis, irritability, altered consciousness, convulsions and focal neurological deficits.

Siberian and Eastern TBEV usually presents as a monophasic illness.

Approximately 20% will show evidence of severe CNS involvement and 1-2% will suffer from chronic neurological deficits such as neuropathy, neuropsychiatric disorders, paralysis and epilepsy.

Diagnosis is confirmed by ELISA detection of antibodies.

PREVENTION

Awareness of risk is the key. Travellers most at risk include those travelling to endemic areas who are hikers, backpackers,

those camping in forested areas and engaging in outdoor pursuits including fishing and hunting and cycling.
Suitable clothing which covers exposed areas of skin, tucking pants into socks, using insect repellent, suitable footwear and checking the skin for ticks on a daily basis are important for prevention.

Children may be at higher risk and should be carefully examined for ticks including areas such as the axillae and groin. Ticks should be removed carefully using a suitable tweezers.

TICK BORNE ENCEPHALITIS VACCINE

This is an inactivated vaccine prepared to provide protection against the European subtype (although it is believed to give protection against the Siberian and eastern subtypes also)

Vaccination should be considered for travellers to endemic areas during the high risk season April to November who will be engaging in outdoor activities as above.

TBEV vaccine is distributed as Ticovac®. It is available in x 2 formulations:

Ticovac® Junior (Age 1-15 years)
Ticovac® (Age >16 years)

It is given as a 3-dose schedule:

- Day 0
- 1-3 months after 1st dose
- 5-12 months after 2nd dose

Rapid schedule option:

- Day 0
- Day 14
- 5-12 months after 2nd dose

CONTRAINDICATIONS TO TBEV VACCINATION

Include:

- Previous anaphylactic reaction to TBE vaccine
- Previous anaphylactic reaction to vaccine components
- Previous anaphylactic reaction to egg ingestion

Full prescribing and Summary of Product Characteristics information is available on the Health Products Regulatory Authority website: www.hpra.ie

Dr. John Gibbons

Travel Medicine Society of Ireland
Annual General Meeting

25th April 2015
in
Stillorgan Park Hotel, Stillorgan, Co. Dublin

Items for the newsletter can be forwarded to:

drconormaguire@gmail.com

or

annehredmond@eircom.net

WHERE DO YOU GO TO?.....TOM DONNELLY

When did you first catch the travel bug?

I first caught the travel bug in my second year in university, I returned after a very boring first year summer break to be enthralled by the anecdotes of some of my class mates one of whom had spent the previous summer as a volunteer painting a church in the Caribbean.

What do you most like about travel?

I liked seeing at first hand things that previously had been the preserve of books and TV programmes. Meeting fellow travellers and sharing experiences was also great.

How extensively have you travelled?

Since my first trip to SriLanka in my early 20's, I returned to Asia several times and travelled in India, Nepal, Thailand, Indonesia and Australia. I have also made forays to Africa and the America's.

Which country did you most enjoy visiting?

I most enjoyed visiting Nepal as it was an arduous physical journey which was also like travelling back to a time when people lived simpler lives.

What was your favourite city to visit?

Paris was my second foreign city to visit after London and it remains my favourite, each time I go there I find something new and exciting.

Are you an adventurous traveller?

I am not particularly adventurous but I am prepared to do things that are slightly risky provided there is an experienced local guide or fellow traveller to show me the ropes.

Are there any aspects of travel which you don't enjoy?

Red eye flights are the worst nightmare for me, essentially you loose a nights sleep even before you have started your travels. Getting a 7am flight means getting up at 4.30am when I am not at my most sociable when meeting Airport personnel.

What can travel teach us about ourselves?

Travel teaches us to be self reliant, assertive, accepting of other cultures, when to be quiet and when to speak out.

Can you give us one useful travel tip?

Always remember that you can replace the hardware (things) when on your travels but the software (passport, yellow fever certificate, Visa cards, Drivers licence, travel insurance) is more difficult to replace so always have back ups in the cloud.

Have you any interesting trips coming up?

I am off to South Korea (work) and Kilimanjaro (leisure) this June so looking forward to the contrast between these two places neither of which I have visited before.

NOTICE BOARD

Dr. Gerard Flaherty has recently been elected to the position of Counsellor for the International Society of Travel Medicine (ISTM) and will serve on the Executive Board from 2015 through 2019. His initial term will begin during the ISTM Member Assembly at the 14th Conference of the International Society of Travel Medicine in May in Quebec City, Canada. The ISTM has over 3000 members worldwide. Dr. Flaherty supervised two summer research projects which have been accepted for poster presentation at the CISTM conference. Both were co-authored by 4th year medical students at NUI Galway - Calvin Teo Jia Han from Malaysia, and Max Javaherian from Ireland. Both students were funded by the Travel Medicine Society of Ireland.

The Travel Medicine Society of Ireland would like to welcome its newest student members. All are medical students at NUI Galway and some attended our most recent regional educational seminar in Athlone. They are currently completing a special study module in Travel Medicine under the supervision of Dr. Gerard Flaherty. Welcome to: Katherine Obudzinski (Sam)Abdul Shameless Aiman Abdul shukur, Megan Conneely, Muhamed Elhadi, Aifric ni Choinin, Orla Kemple, Eoghan Shanley, Conor Gormley, Ben Mulholland and ChristopherThong.

At a recent meeting of the Executive Committee of the TMSI, there was unanimous endorsement of a new award, to be sponsored by the TMSI each year, which will be given to the most outstanding entry in an annual essay prize open to all registered medical students in Ireland. The prize of a gold medal - the Dr. Dom Colbert Medal - will be presented at the Society's AGM from 2016 onwards and the winning essayist will be invited to present his/her work to our members. The winning essay, based on an important topic in Travel Medicine, will be published in Taisteal.

Dr. Gerard Flaherty has had an invited editorial accepted for publication in the next issue of the journal Travel Medicine and Infectious Disease. The full title of the paper is: "Going Viral - Embracing the Culture of Social Media in Travel Medicine".

WHAT'S IN THE PAPERS?
A REVIEW OF THE RECENT LITERATURE IN TRAVEL MEDICINE

Wagner KS, Freedman JL, Andrews NJ, Jones JA. Effectiveness of the Typhoid Vi Vaccine in Overseas Travelers from England. J Travel Med. 2014 Nov 30. doi: 10.1111/jtm.12178. [Epub ahead of print]

The UK imports about 500 cases of enteric fever, caused by Salmonella enteric serovar Typhi and Paratyphi, each year. Most cases have originated from the Indian subcontinent. The typhoid Vi vaccine protects against S. typhi and is used frequently in travel medicine clinics in the British Isles. While the efficacy of this vaccine has been established in endemic regions of the world, this is the first study to examine its effectiveness in travellers themselves. A case-control study design was used, based on data from the enhanced surveillance scheme in England of international travellers aged 2 years or more. The overall level of effectiveness of this vaccine, adjusting for various factors including age and gender, was 65% (95% confidence interval 53%-73%). There was some evidence of reduced effectiveness of the vaccine with increasing time since its administration (trend p = 0.05). This is a similar degree of effectiveness as that observed in endemic populations. It is reassuring that the vaccine appears to protect all age groups, including children aged 2-5 years. The limited effectiveness does underscore the need to provide good hygiene advice to travellers, however, in addition to offering the vaccine.

Boggild AK, Lau R, Reynaud D, Kain KC, Gerson M. Failure of atovaquone-proguanil malaria chemoprophylaxis in a traveler to Ghana. Travel Med Infect Dis. 2015 Jan-Feb;13(1):89-93. doi: 10.1016/j.tmaid.2014.12.010. Epub 2014 Dec 31.

Failure of atovaquone-proguanil (Malarone®) to prevent falciparum malaria infection in travellers is an extremely rare occurrence. The authors of this paper report a case of Plasmodium falciparum malaria in a 28-year-old woman who had returned from Ghana and who had complied fully with a daily regimen of atovaquone-proguanil. She was diagnosed 5 days post-travel. The patient had taken the pills on an empty stomach. Screening of the drug-resistant isolate of P. falciparum revealed specific genetic mutations. Plasma drug levels of both atovaquone and proguanil confirmed sub-therapeutic levels of both. This case highlights the threat of drug-resistant P. falciparum malaria but also should remind us to reinforce specific advice to our travellers about how to correctly take their prescribed medications. This traveller took the drug each morning before breakfast with a glass of water, instead of taking it with food as recommended by the manufacturers.

Bauer IL. Contact lens wearers' experiences while trekking in the Khumbu region/Nepal: A cross-sectional survey. Travel Med Infect Dis. 2014 Dec 27. pii: S1477-8939(14)00260-9. doi: 10.1016/j.tmaid.2014.12.005. [Epub ahead of print]

As a soft contact lens wearer who has trekked twice in Nepal, this article caught my eye! Maintaining an appropriate hygiene regimen may be difficult in a wilderness environment. The air is very dry at altitude and some environments may be more dusty than usual for the contact lens wearer. This descriptive study examined the experience of contact lens wearers who were trekking at high altitude in Nepal. Trekkers were recruited when they arrived by plane in Lukla at the beginning of the Everest trail. They completed an online questionnaire on trip preparation, contact lens use, care and experiences. The majority of the 158 subjects had no problems with their lenses, which varied from daily disposable to hard lenses. They did report the challenging nature of the dry air, dust, wind, cold temperatures, and difficulty of keeping good hygiene in relation to their lenses. Some lenses and lens solutions froze at higher altitudes. Participants suggested that accommodation lodges provide better access to clean water, mirrors and lighting. Of note, almost 60% of trekkers had not sought any pre-travel health advice, a startling finding given the many health risks they would face at high altitude. The challenging realities of trekking while wearing contact lenses and the risk of ocular infections and corneal abrasions need to be mentioned by the travel health practitioner when counselling trekkers to remote, high altitude environments.

Sane J, de Sousa R, van Pelt W, Petrignani M, Verhoef L, Koopmans M. Risk of Hepatitis A Decreased Among Dutch Travelers to Endemic Regions in 2003 to 2011. J Travel Med. 2014 Dec 22. doi: 10.1111/jtm.12181. [Epub ahead of print]

This interesting study estimated the risk of hepatitis A among Dutch travellers by dividing the number of travel-related hepatitis A cases notified to the Dutch public health authorities between 2003 and 2011 by travel data obtained from an annual holiday survey. There were 2,094 cases of hepatitis A infection notified during this time period, 931 (44%) of which were imported to the Netherlands. The most important source countries represented in the study were Morocco (n=272, 29%), Turkey (n=98, 11%), and Egypt (n=87, 9%). Rates of hepatitis A infection in travellers returning from intermediate or high risk endemic regions dropped from 7.5 per 100,000 travellers in 2003-2005 to 3.5 per 100,000 travellers in 2009-2011 ($p<0.01$). Despite this reduction in risk, the authors reinforce the importance of vaccination against this serious travel-related infectious disease.

Dr. G. Flaherty, NUIG

BACK TO BASICS – MALARIA

April 25th is World Malaria Day and it is worthwhile to consider the burden of malaria and how we as clinicians can best spread the message of prevention.

MALARIA FAST FACTS

Malaria is a life threatening disease caused by the transmission of Plasmodium parasites to humans through the bite of Anopheles mosquitoes. There are five species of malaria parasite known to cause malaria:

- Plasmodium Falciparum
- Plasmodium Vivax
- Plasmodium Ovale
- Plasmodium Malariae
- Plasmodium knowlesi

Whilst all humans will be at risk whilst residing in malaria endemic areas, certain groups are at greater risk of severe disease.

- Children who are non-immune
- Non-immune pregnant women
- Semi-immune pregnant women in areas of high transmission
- Travellers from non endemic areas who are non-immune
- Immigrants and their children from malaria endemic areas returning to their home countries to visit friends and relatives because of absent or waning malaria semi-immunity.
- People with HIV/AIDS
- People who are immunosuppressed or have other significant chronic disease and co-morbidities.

THE BURDEN OF MALARIA

A. There were approximately 198 million cases of malaria worldwide in 2013
B. There were approximately 584000 deaths from malaria in 2013
C. Approximately 3.1 billion people worldwide are at risk of malaria.
D. The greatest burden of malaria deaths globally is in sub Saharan Africa
E. The largest proportion of cases of imported malaria to Europe including Ireland are from West Africa.

Most imported malaria cases occur among African immigrants who return from visiting friends and relatives in their country of origin. Immigrants returning to visit their home country are frequently referred to as VFR travellers.

VFR travellers may:

- Be less likely to attend for pre-travel medical advice.
- Be less likely to take effective malaria chemoprophylaxis
- Visit areas in their home country with higher risk of malaria (non-urban areas)
- Stay in traditional accommodation, which may not afford mosquito ingress protection measures such as window and door screens or air conditioning.
- Not have access to or use insect repellents consistently
- Be not have access to Insecticide Treated Bednets (ITN's)

Education is the key and with the commitment of malaria endemic countries together with the efforts of international agencies, the fight against this ancient curse has begun to give cause for optimism.

- The malaria mortality rate among African children has fallen by 58% since 2000.
- Overall global malaria mortality figures reported in 2013 are 47 % less than in 2000.
- In Africa, the reduction in malaria mortality has been 54%.

By adopting rigorous vector control measures, X four countries have been declared malaria free (UAE, Turkmenistan, Morocco, Armenia) and many others have achieved impressive reductions in the burden of malaria by using

- Vector control measures such as elimination of stagnant water sources
- Encouraging the distribution of long lasting insecticide treated bednets (LLIN) Indoor residual insecticide spraying programs
- Targeted intermittent chemoprophylaxis programs for:
- Infants at the time of routine vaccination
- Children under 5 during periods of high malaria transmission
- Pregnant women during antenatal visits after the first trimester.

There are many potential malaria vaccines in trial and one vaccine has been submitted to the European Medicines Agency for evaluation and approval.

THE A B C D OF MALARIA PREVENTION

Awareness

Awareness of malaria risk should include more than just the potential for malaria transmission at a particular destination. The style and type of travel, duration, season, quality of accommodation, activities and health status of the traveller are some of the key determinants of malaria risk.

Bite prevention

Put simply, with the exception of malaria transmitted in utero and very rare transmission via blood transfusion, malaria can only be transmitted via a mosquito bite. Bite prevention by adopting suitable clothing, using insect repellent, Insecticide treated bednets and/or sleeping in air conditioned accommodation is by far the most cost effective method at preventing malaria.

Chemoprophylaxis

No preventive strategy, including chemoprophylaxis, is 100% effective, however when combined, the ABCD approach to malaria prevention is very effective. It is important that clinicians have access to up to date information on suitable malaria chemoprophylactic interventions for at risk groups. Databases such as Travax and Nathnac provide up to date data and advice.

Diagnosis

Malaria is a life threatening parasitic infection and falciparum malaria, which represents about three quarters of cases currently imported into Ireland, is the most deadly. Prompt diagnosis is critical for successful outcomes.
Malaria usually presents with flu-like symptoms including fever, chills, headache and vomiting. Travellers must be aware that they should be tested for malaria without delay should they develop such symptoms during or following travel to a malaria endemic region.
Many people will forget to report recent travel to their doctor or may not link their current illness to recent travel. Clinicians should ALWAYS ask about recent travel.

Groups such as business travellers, vacationers and those planning to work abroad are likely to attend for classic pre-travel consultations.

Ironically, groups such as VFR travellers who are most likely to be at risk from malaria are also less likely to consult before they travel and less likely to adopt robust malaria prevention measures.

Additionally, increased international travel and a growing population of immigrants from malaria endemic territories will result in an increased likelihood of imported malaria to Ireland.

Finding clever cost effective ways to engage with and educate these groups and integrating travel medicine advice as part of their day-to-day general medical care may pay dividends in the long run.

It's an old adage in medicine that "common things are common". In regions of high malaria transmission, malaria can as common a presentation to clinicians as the common cold is in northern Europe. Easy international travel and immigration are altering our perspectives in clinical practice.

Dr. John Gibbons

References:

1) Guidelines for malaria prevention in travellers from the UK; Public Health England, 2013

2) Lalloo DG, Hill DR; Preventing malaria in travellers. BMJ. 2008 Jun 14;336(7657):1362-6.

3) Imported malaria cases and deaths, United Kingdom: 1994-2013; Malaria Reference Laboratory, Public Health England

4) http://www.who.int/campaigns/malaria-day/2015/event/en/

GLOBAL ROUND-UP

EBOLA VIRUS: A total of 82 new confirmed cases of Ebola virus disease (EVD) were reported during the week to 29 March 2015. This denotes an increase of 3 new cases, compared with the previous week.

Guinea - a 45-day state of health emergency has been declared in Forecariah, Coyah, Dubreka, Boffa, Kindia and the capital, Conakry. Measures include: restriction of movement in transmission areas, temporary closure/quarantine of private hospitals and clinics with EVD cases and limitation of close family only at burial participation.
Liberia - the last confirmed case died on 27 March 2015. Investigations are ongoing to establish the source of infection. A total of 185 contacts associated with the case are being monitored twice a day.
Sierra Leone - cases have been reported from 5 northern and western districts, including the capital Freetown, which reported 10 new confirmed cases. The neighbouring districts of Bombali (1), Kambia (5), Port Loko (6) and Western Rural (3) also reported cases.

Infections continue to be reported in healthcare workers; in the week to 29 March: Guinea (7), Sierra Leone (1). This brings the total number reported across Guinea, Liberia and Sierra Leone to 861 with 495 deaths.

As of 01 April 2015, more than 25 178 confirmed, probable and suspected cases of EVD and more than 10 000 deaths have been reported to WHO by the Ministries of Health for Guinea, Sierra Leone and Liberia. The distribution of the cases in West Africa is listed below, case numbers include confirmed, probable and suspected:

Guinea - 3492 cases and 2314 deaths, cases in last 21 days 197.
Liberia - 9712 cases and 4332 deaths, cases in last 21 days 1.
Sierra Leone - 11 974 cases and 3799 deaths, cases in last 21 days 113. *Source: who.int*

DENGUE: Dengue fever has been reported from Paraguay. As of 27 March 2015, a total of 7073 probable cases have been recorded nationally. Of those, 573 have been confirmed as Dengue virus infection. *Source: paho.org*

The outbreak of Dengue fever in Fiji is ongoing. As of 27 March 2015, the total number of confirmed cases has risen to 426 nationally. The worst affected province is Mauata and new cases are said to be increasing.
Source: ProMed

The Dengue situation in Brazil remains unchanged; as of 27 March 2015, a total of 224 101 suspected cases have been reported this year, thus far. Of the suspected cases, 5248 have been confirmed as dengue virus infection. *Source: ProMed*

Mozambique. An outbreak of Dengue fever has been reported in Nampula province on the northeast coast of the country. As of 22 March 2015, a total 577 suspected cases have been reported; of those, 143 have been confirmed. 01 April 2015 - Cases are said to be increasing as 110 suspected new infections were recorded last week alone.
Source: ProMed

CHOLERA: The Ministry of Health for Mozambique has reported that the ongoing cholera outbreak in the country has now spread to the central province of Sofala. A total of 260 cases have been reported in Sofala between 1-14 March 2015. Affected areas include: Caia (129 cases), Nhamatanda (91 cases) and the provincial capital of Beira (40 cases). *Source: ProMED*

The Cholera outbreak in Nsanje district in the Southern Region of Malawi is ongoing and beginning to spread. The outbreak followed recent severe flooding in the country.
To date, the number of cholera cases now stands at 159, with 27 cases being treated in one week recently.
The District Health Office is endeavouring to contain the outbreak with ongoing awareness and sensitisation campaigns. Aid has included donations of chlorine and rehydration salts by several non governmental organisations. *Source: allafrica.com*

HIV/AIDS: Sudan. The media has reported that the Minister of Health for Khartoum state has warned of hepatitis and HIV/AIDS transmission through medical waste. Minister Mamoun Humeida is alleged to have advised reporters that the hospitals and health clinics in Khartoum produce 10 tons of waste each day and that samples of human waste found in a main street in the city may have leaked from medical waste lorries.
Travellers should be made aware that Sudan is a country with high prevalence of HIV transmission Travellers should be reminded of the transmission routes of blood-borne viruses and risk reduction behaviours. HIV is present throughout the world. Worldwide, the commonest route of transmission of HIV is unprotected sex.
Source: allafrica.com

Travel Medicine Conference Calendar

Travel Medicine Society of Ireland, Annual General Meeting & Lecture 25 April 2015
Location: Stillorgan Park Hotel, Stillorgan, Co. Dublin
Time: 9:15 am – 10:30 am A.G.M. Lecture & Q's & A's 11:00 am - 1:00 pm
Guest Speaker: Dr. Alex Grieve
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

The 14th Conference of the International Society of Travel Medicine 24-28 May 2015
Québec City, Canada
Early registration: 31 December 2014. Abstract submission: 15 January 2015
Further information: www.istm.org

Travel Medicine Society of Ireland, Full-day meeting/workshop 12 September 2015
Location: Ardilaun Hotel, Taylors Hill, Galway
Time: 9:00 am – 5:00 pm
Guest Spearker: Dr. Patricia Schlagenhauf, Switzerland, Dr. Dom Colbert, Ireland, Nr. Anne McDonald, Scotland.
Fees: Members €45.00, Non-Members €60.00 (includes morning & afternoon teas/coffees, lunch)
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

Travel Medicine Society of Ireland 7 November 2015
Location: Clarion Hotel, Liffey Valley, Lucan, Co. Dublin
Time: 9:00 am – 1:00 pm
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

The 1st Croatian Congress on Travel, Tropical, Migration Medicine & HIV with international participation, will be held in Dubrovnik, Croatia, on October 1-4, 2015. The Society of Travel, Tropical and Migration Medicine of the Croatian Medical Association is a young society, the first of this kind in the region. The main goal of the congress is to bring together Southeastern European health care workers with various professional backgrounds and leading experts in the field to share knowledge and expertise on prevention, diagnosis and treatment of the most common diseases in travelers and migrants, major tropical diseases and HIV infection. For more information go to www.hdptm.hr.

3rd Tropical Medicine Excursion to Ghana, West Africa. 25 November - 5 December 2015
In collaboration with various teaching hospitals in Ghana and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. 11 days round-trip excursion (1400 km by road) for healthcare professionals on clinical tropical medicine and travellers'health to the endemic areas of Ghana. Includes individual on-site bedside teaching, laboratory manuals (hands-on microscopy on parasites in the blood, stool, urine and skin), field excursions and lectures. Accreditation: 60 CME contact hours by the Medical Association, Düsseldorf, Germany. Official language: English. www.tropmedex.com.