



Good Morning/Afternoon, Ladies and Gentlemen

Thank you for this opportunity to be in your beautiful country and to tell you about my experiences in South Africa.

The subject of my address to you is: **The Rickettsial approach to the treatment of diseases grouped today as CFS**

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The Rickettsial Approach

- Topics
 - Background
 - Research on Rickettsiae
 - Rickettsiae and CFS
 - Transmission
 - Patients' diagnosis
 - Treatment
 - Summary
 - Questions

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PRESS ENTER ;

This is what I will be covering today -----,

and this paper will be available as a handout. In my handout, I have noted the references which I used in drawing my conclusions. I have also brought all my reference material with me, for your interest, and to take copies if you wish.

First I think I must tell you how I came to link the **'forgotten disease'** of Rickettsia with the crop of new diseases.

NEXT SLIDE ;

Background

- Who I am
 - Belgium
 - Surgeon
 - Clinician
 - Prof. Jadin's daughter
- How I came to be here
 - My first patient

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I am originally from Belgium, but I have been practising in South Africa for the last 17 years. I am a surgeon by profession.

In South Africa, in addition to practising as a surgeon, I also assisted my husband in his general practice. **For the last 7 years**, I have been focusing on the subject of my paper and **my approach has naturally been that of a clinician**, and it is in this context that I am presenting my paper.

I wish to explain something of my background, so that you understand why I took the Rickettsial approach. I was born in the then Belgian Congo, because my father was Professor JB Jadin, who undertook groundbreaking research on tropical diseases, among them Rickettsial infection, with Professor Paul Giroud in Central Africa, South Africa, the Near East, and in Europe, developing the work started in the Pasteur Institute of Tunisia, with Professor Charles Nicolle, who was a disciple of Louis Pasteur. Thus I was familiar with those germs from an early age and my work represents the results of teamwork through the last 100 years.



12 years ago, one of my friends became unable to walk and was diagnosed as having ME. For 4 years I suggested the diagnosis of Rickettsial Infection, therefore the Weil-Felix test was performed several times in South Africa but the results were negative.

One day, she came to see me with an acute appendicitis. After I removed her appendix, upon her request, I sent her serum to my father to test for Rickettsiae, **and it was positive**. I treated her with Tetracyclines and **3 weeks later, she was riding her horse again**.

I was sceptical.

But this case brought me a couple of 100 patients and the publicity surrounding an investigation of my methodology by the South African Medical Council brought me several thousand more.

So I began to focus on the Rickettsial Approach.

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Rickettsial Research

- Prof. Charles Nicolle hypothesis
- Occult diseases and the immune system
- Activation
 - virus, bacteria, parasite, stress or pollution
- An example:
 - Infants in Central Africa with malaria and Coxiella Burnetti all died as opposed to those with malaria only
- Unfortunate lack of publicity

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Research on Rickettsioses was originally developed by French, Polish and Russian scientists.



They followed the hypothesis of Charles Nicolle: - Pasteur Institute, winner of the Nobel Prize for medicine in 1933



which is that **occult diseases** are a reality and their cohabitation in the same host will lead to the bankruptcy of the immune system. By **occult** disease, Charles Nicolle implies the **asymptomatic** stage of the disease, where the **agent** is **present** in the host, but **dormant**.



The emergence of a virus, bacteria, parasite, stress or pollution can **activate** this agent, which leads to the **symptomatic** stage.



An example of this cohabitation is the infant mortality rate described by J.B. Jadin in Central Africa. Neonates diagnosed with malaria **and** Coxiella Burnetti **all died** as opposed to those with malaria only.



The numerous publications of these authors are **unfortunately** all in French, so their circulation was limited. They also, as academics, excluded the media. Therefore the **real importance of their discovery is still to be made widely known**.

Let us now look at the **possible** links between **Rickettsia** and **CFS**.

NEXT SLIDE

Rickettsia and CFS

- Etiological versus Syndrome route
 - Focusing on the causative agent
 - CFS infectious etiology
 - Incline Nevada (1984)
 - RMSF (1916)
 - Borrelia Duttoni - Malgache Fever (1702, 1933, 1944, 1950)
 - Lyme Disease (1975)
 - Epidemic and historic wave pattern

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The fairly recently recognised entity of **CFS** gives us a **perfect opportunity** to try the etiological route to understand this disease.Along this route, we will automatically enter other medical fields, inviting us to consider an infectious etiology in cardiology, in psychiatry, in neurology, and in rheumatology, rather than **describing** the symptoms and **gathering** them into syndromes .



Obviously one germ can cause many diseases - depending on a selective topicality for one or more particular tissues. Also, one disease can be caused by **different germs alone or simultaneously**.

Therefore we would like to concentrate **on the causative agent** rather than **on the name of**, and the **criteria to classify**, the diseases.

There are **many** reasons suggesting the infectious etiology and, more specifically, Rickettsial-like organisms of CFS. Amongst those reasons:



CFS was first reported in Incline, Nevada in 1984 and developed into epidemic proportions.

- Rocky Mountain Spotted Fever originated from the same place in 1916
- The spirochete Borrelia Duttoni, first blamed for causing the recurrent Malgache fever described in the journals written by Drury in 1702 in Madagascar, then by Scheltz in the Belgian Congo in 1933, by Palakov in Cape Town in 1944, by Heisch in Kenya in 1950.
- Lyme Disease appeared (or reappeared?) more recently in Lyme, Connecticut in 1975.

Could these be new names for old diseases?



All of the above highlights the life of a germ as an individual emerging and disappearing in a wave pattern epidemically and historically. Like us, germs have to adapt, producing new variations of themselves, (not new species), that may or may not survive on their own, with or without the help of another germ. This is circumstance-dependent, and these particular circumstances will never reoccur. Some of those variations will acquire specific and consistent characteristics.

This is their '**civilisation**'. We only see them when they succeed, and only then do new avenues of investigation open up, while others are abandoned.

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Rickettsia and CFS

- Etiological versus Syndrome route
 - Florence Nightingale disease
 - Zinsser - 'Rats, Lice and History'
 - Lymphocyte studies similarities
 - sheep - tick-borne diseases
 - CFS patients
 - Q Fever endocarditis patients
 - Louse-borne epidemic typhus

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Continuing the discussion on the Etiological versus the Syndrome route:



A link has been established between Florence Nightingale disease and CFS. The fact that she was working surrounded by lice, fleas and ticks, treating soldiers with wounds and with epidemic typhus during the Crimean war, could be a logical explanation as to why she was **terribly tired** during the last 2 decades of her life; and **possibly** has relevance to Gulf War illnesses.



Zinsser has developed the same concept in his classic book "Rats, Lice and History". He contends: "Soldiers have rarely won wars. Typhus and other infectious diseases have decided the outcome of more military campaigns than Caesar, Hannibal, Napoleon and all generals in history. Depending on the outcome for each warring faction, either the epidemics were blamed for defeat, or the generals were credited with victory".

More examples of this phenomenon were reported by JB Jadin.



Lymphocyte studies conducted on sheep with tick-borne diseases, CFS patients, and patients with Q Fever endocarditis, are showing **amazingly similar** results.

Coincidentally, the new name suggested in the Lancet for CFS is PQFS (Post Q Fever Syndrome) in April 1996.



During the First World War, an estimated **25 million** Russians contracted Louse-borne epidemic typhus, resulting in **3 million** deaths. Why not before or after? It **could** suggest that the stress factor **reactivates** the virulence of Typhus Prowazeki. In the medical history of CFS patients, **stress has often been described** as the start of the illness.

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Rickettsia and CFS

- Commonality and Diversity of symptoms
- Could the well-known Rickettsial entity and the newly arrived CFS be caused by the same agent?
- Success rate of Rickettsia treatment:
– **84 - 96% recovery rate.**

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The symptoms displayed by CFS, Fibromyalgia, RA, depression and even neurological patients as MS, show the **same diversity** of symptoms as Rickettsial patients.

How many scientists blamed the **diversity of symptoms** for misleading unprepared practitioners in the diagnosis of chronic Rickettsial infection? That **same diversity** could have contributed to the delay in recognising CFS.



French authors (Giroud, Jadin, Legag) attribute those multiple aspects to a generalized micro-vascular invasion. They widely demonstrated the persistence of Rickettsiae in the vessels. The suggestion here is that the **well-known, well-documented** entity of Rickettsial disease, showing the **same symptoms** as the **newly arrived** CFS, might simply, partially or totally be caused by the **same agent**.



The last, but **not the least** reason, is the **success rate** of the Rickettsia treatment, Tetracycline, applied on **CFS, Fibromyalgia etc.** patients. Dr Phillippe Bottero on 180 patients, Dr Peter Tarbleton on 300 patients and myself on a much larger number of patients, maintain an **84% - to 96%** recovery rate.

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Transmission of Rickettsiae

- They are transmitted by Arthropods:
 - humidity **and** dryness resistant
 - stayers:
 - virulent for 60 days in milk
 - 4 months in sand
 - 6 months in meat
 - 7 -9 months in cotton
- They are spread by rodents and birds and by modern air traffic
- Fish share the disease

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Rickettsiae are transmitted by arthropodes, except for Q Fever, which does not really need vectors;

- they are resistant to humidity and to dryness
- they will stay virulent for 60 days in milk
- 4 months in sand
- 6 months in meat
- 7 - 9 months in cotton



They are spread by rodents and birds. Through the centuries, bird migration has been responsible for changing the geographical distribution of disease - but this is nothing compared to the effect of the explosion of these diseases due to the cocktail effect created by distribution through global air traffic.

Equally the transport of insects compared to the import and export of livestock - as in the case of the import of 10,000 parrots from Paraguay to Belgium when some 2,000 died, leaving the virus well and alive behind them, (identified by my father as Neo-Rickettsia Bedsonia).

This world distribution does not include Antarctica, where they do not survive.



Fish also share this disease, as Erlichioses is, according to breeders, a common problem.

I would now like to discuss my patients and their diagnosis.

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Patients and Diagnosis

- 3,400 patients presented with CFS, Fibromyalgia, RA, Depression, MS diagnosed with CRI
- CRI established by Giroud M-A test:
 - R. Prowazeki
 - R. Mooseri
 - R. Conori
 - Coxiella Burnetti
 - Neo Rickettsia Chlamydiae
- Important:
 - High reading = High antibodies
 - -ve reading = Low immune system
- +ve tests found without symptoms (26%)

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3,400 patients presented with CFS, Fibromyalgia, RA, depression and MS have been diagnosed as suffering from **Chronic Rickettsial Infection (CRI)** after eliminating other diseases as a cause such as diabetes, cancer etc.

The majority of my patients report a flu-like infection, with often an elevated temperature and severe headaches. This lasts for a few days, disappears **or** reoccurs, and then leaves them with a chronic condition of CFS, Fibromyalgia etc. as mentioned above.



Diagnosis of CRI is established by Giroud's Micro-Agglutination test against these **five strains of Rickettsiae**.

R. Prowazeki is the epidemic type of Typhus. **R. Mooseri** is endemic. **R. Conori** belongs to the Spotted Fever group.

C. Burnetti is well known as Q Fever: It has 2 phases, influenced by the host, Phase II is pathogenic. **Chlamydiae Q18** falls into the group of Neo-Rickettsia.

Important Points to note are that:

- A high reading means a high serological level of antibodies - a negative reading in endemic areas reflects the poverty of the immune system
- Agglutination happens or does not - therefore there is no possibility of personal interpretation. Test quality depends on Antigen quality
- Positive tests can be found in people who display no symptoms according to Giroud and Jadin; 26% are positive according to Drancourt.

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Patients and Diagnosis - 3 Cornerstones

Giroud not the only tool.

- Cornerstone 1: Blood tests:
 - LFT
 - Iron
 - Thyroid AB - 28% of cases
 - CRP, RF, ANF, WR - 53% of cases
 - Mycoplasma

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We can say that the diagnosis of Rickettsia rests on **3 cornerstones**.



The Micro-Agglutination test of Giroud is not our only tool to establish the diagnosis of Rickettsial infections.



Because we find the following blood tests most relevant:

- **LFT**: the hepatotoxicity of Rickettsiae has been reported as early as 1937 by Derrick in Q Fever, followed by many others - Giroud, Lenette, Legag, Brezina, Perron, Kelly, Raoult, etc. In these cases, Tetracyclines are improving or normalizing liver function.
- **Iron study** showed 50% of abnormalities corrected with Tetracyclines only and when necessary with a short course of iron supplement.
- **Thyroid AB** rather than **TFT**, although the **TFT** show abnormalities in 3% of patients, the Thyroid AB are elevated in **28%** of cases and improve or normalise **rapidly** with treatment.
- **CRP, RF, ANF, WR** positive in 53% of patients and also improved with treatment, and often normalised.
- **Mycoplasma** - I only started to research after the Manly conference in February 1998).

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Cornerstone 2:

Symptoms most commonly presented:

- Tiredness
- Headaches, retroorbital and temporal
- Myalgia
- Arthralgia migrating
- Loss of balance
- Vision abnormalities
- Raynaud syndrome
- Nausea
- Recurrent sore throat
- Memory and concentration deficit
- Chest pain, palpitations
- Sweats, low grade fever
- Bruising Psychological and neurological disorders

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The **second cornerstone** is the Patient's symptoms. These are the symptoms most commonly exhibited.

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Headaches, retroorbital **and** temporal, seem to be worst after prolonged horizontal position or mental effort.

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Cornerstone no 3: Physical Examination

- Inflamed throat
- Multiple adenopathies
- Heart abnormalities; vascular and valvular
- RIF tenderness

These 3 Cornerstones:



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The Third corner stone is the Physical Examination, which is quite a constant guideline, because it often shows the following:



- Inflamed throat,
- Multiple adenopathies,
- Heart abnormalities - vascular and valvular impact
- RIF tenderness.



After establishing these **3 cornerstones**

- Blood tests
- Symptoms
- Physical examination

treatment is administered:

- Guided by our predecessors, (Giroud, Jadin, Legag etc.)
- Refined by our contemporaries, (Bottero and Raoult)
- and by my own daily, private lessons (each patient is one).

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Treatment

- 7 to 12 days/month Tetracyclines
 - **High Dosage** with limitation:
 - Safety
 - Tolerance
 - **Herxheimer Reaction**
 - **Alternated** Tetracyclines
 - many strains of Rickettsiae
 - Resistance
 - **Combined** with
 - Quinolones, Macrolides, Metronidazole
 - because Rickettsiae have wide heterogeneity of susceptibility to different drugs
 - **Treatment extended** due to:
 - Germ chronicity
 - multiple foci
 - inactive Rickettsiae
 - Each treatment supports the immune system
 - Length of disease does not imply lengthy treatment

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The treatment consists of 7 to 12 days per month of a **specific Tetracycline**. The monthly treatment aims to follow the Rickettsial development in the cell.

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A **high dosage** is required with the limitation of:

•**Safety:** Goodman et al highlights irreversible hepatotoxicity in intravenous administration only. Our experience was that when liver functions were normal to start with, they stay normal. If they were abnormal, they will improve during treatment and generally return to normal. Cases of fatty acid depots (as shown by liver scan, before and after 6 months to 1 year of treatment) have disappeared (1 MS, 4 ME). This confirms the fact that Rickettsiae are more hepatotoxic than Tetracyclines.

•**Tolerance:** The gastric intolerance will be successfully prevented by using a gastric pump inhibitor during and if necessary before and after the administration of the Tetracyclines. The tolerance of the treatment is directly related to the **Herxheimer** reaction, which is a reactivation of old symptoms and/or exacerbation of present symptoms, that occurs on antibiotherapy. Its presence has a very important diagnosis and prognosis value. They might or might not be parallel to a serological reactivation. It will fade with the number of treatments received. When very severe, the **Herxheimer** is treated with Probenecid.

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The Tetracyclines are **alternated** because: A patient is frequently contaminated by many strains of Rickettsiae and different Rickettsiae have different sensitivity to different Tetracyclines, or combinations. A patient might build resistance to each Tetracycline. Patients show individual sensitivity to different Tetracyclines or combinations and there is very often a privileged reaction to a specific treatment.

⌚
The Tetracyclines are **combined** with Quinolones, Macrolides or Metronidazole, because Rickettsiae present a wide heterogeneity of susceptibility to different drugs

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The treatment is often **long** due to: The chronicity of the germ, The multiple foci of Rickettsiae and The fact that Rickettsiae have a slow evolution and some foci are dormant, encapsulated and therefore protected from antibiotherapy. Only when they become active can they be treated.

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Each treatment will allow the immune system to produce and maintain a proper and efficient level of antibodies. This happens each time the antigen Rickettsiae are released from the cell to the blood stream while on antibiotherapy.

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The **length** of the disease should logically imply a **lengthy** treatment. In our experience, this point is **not always true**. Patients, ill for many years, may recover after a **few months** treatment.

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Treatment ...continued

- Antimalaria improves Rheumatoid symptoms
- Vitamin B comp and acidobacillus
- Cortisone avoided
- Exercise recommended:
 - Rickettsiae a vascular disease
 - Rickettsiae like CO₂ atmosphere
 - Rickettsiae like a low host metabolism
- Hot baths - eliminate toxins
- Reinfection and reactivation

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Antimalaria has been found efficient to improve Rheumatoid symptoms and Rheumatoid biological findings (see patients' files).

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Adjuvants such as Vitamin B complex and acidobacillus are also used.

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Cortisone is avoided as much as possible as it is known to weaken the Immune System in general and also to reactivate the disease in experiments on guinea-pigs. Cortisone has been accused of interfering with the diagnosis of Rickettsia by masking the antibody level.

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Exercise is recommended, for 3 reasons:

- Rickettsial infection is a vascular disease and exercise, properly done, will improve the smooth peri-vascular muscle function, as well as develop our biggest muscle, the heart.
- The fact that strains of Rickettsiae grow better in vitro when maintained in a CO₂ enriched atmosphere (34).
- The suggestion that Rickettsiae grow best when the metabolism of the host cell is low (38).

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Hot baths are important to eliminate toxins via the skin, produced by Rickettsiae antigens when liberated in the bloodstream by antibiotherapy.

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Reinfection may obviously occur. Reactivation (called so rather than relapse) may also happen due to the interaction of bacteria, virus, stress, pollution, etc. causing the Rickettsiae forms' change to active from dormant.

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Measurement of Progress

- Patients seen monthly to judge progress:
 - Symptoms
 - Activity increase
 - Reduction in medication:
 - Medical examination
 - Biological investigation - back to normal:
 - LFT
 - RF
 - CRP
 - KFT
 - Thyroid antibodies
 - Iron
- Assess treatment
- Patients - either
 - Fast progress - illness mainly Rickettsia
 - Slow progress - illness Rickettsia +

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Patients are seen monthly to judge progress on their symptoms, activity increase - from bedridden to back to exercise or back to work; - from being treated by painkillers, antidepressants, sedatives, cortisone to none. They are given a medical examination, and a biological investigation to measure the progress back to normal, or nearly so of: LFT - RF -, ANF -, KFT -, Thyroid antibodies -, Iron.

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Based on the assessment, the treatment is prolonged or stopped. The time period can be 3 months to 2 years; and is 8 months on average. However, as previously mentioned, the length of treatment is not directly correlated to the length of illness:

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Therefore patients can be divided into 2 categories:

1. Fast progress - their illness was mainly Rickettsia
2. Slow progress - their illness was Rickettsia plus other factors.

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Progress to health



"La santé est comme une mongolfière : il faut parfois lâcher du lest"¹⁶

My suggestion is that by controlling Rickettsia, we can also assist in repairing the Immune system, either quickly or slowly....

Health is like a hot air balloon.

You have to get rid of excess burdens to keep it in the air. Rickettsia is the easy one to lose.

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Cécile Jadin

Thank you for
your time!



Any Questions?

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Ladies and gentlemen,

I thank you for your time and for this opportunity..

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I believe I have some time left for questions?

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The Rickettsial Approach

_CL Jadin

MD MBBCh

DO NOT REMOVE:

After Questions, Leave the Podium!!