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"Redefining Psychiatric and Neurologic
Co-morbidities as Systemic Dysfunction"

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Redefining Psychiatric and Neurologic Comorbidities as Systemic Dysfunctions

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Transcript of <http://vimeo.com/33118843> video.

Highlights from the presentation of Dr Roswitha Goetze-Pelka at the 2011 Autoimmunity Congress Asia. She discusses the new data supporting Plato's observation that "the greatest mistake in the treatment of diseases is that there are physicians for the body, and physicians for the soul, although the two cannot be separated."

Transcript

00:00:05

First I want to thank you for having been invited to speak in front of you about the very important Psychiatric issues in autoimmunity diseases.

For about 50 years now, Psychiatric comorbidities have gained more scientific interest, so since then more studies have been done about these things.

Nevertheless, when I have searched the literature, I recognized that they do not give the real, the true picture, of what is going on but they give an impression about importance at which increments these co-morbidities have on the cause of disease.

Because [study type similarities] tend to be rather low and especially, the designs different, and they use different methods to connect—especially to assess psychological symptoms—then that is a problem. But nevertheless, they give a wonderful impression of what is going on.

From a Psychiatrist's point of view, autoimmunity diseases are very interesting because when you have to deal with a case, Psychiatric patients—mainly Schizophrenic or Bipolar if you do this—you will encounter them suffering from other autoimmunity diseases too.

You will encounter their family and then you will find autoimmune diseases and so on and on. So you have to be familiar as a Psychiatrist with autoimmune diseases.

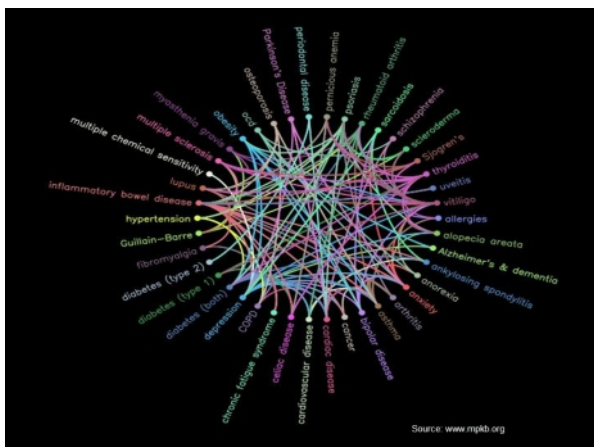
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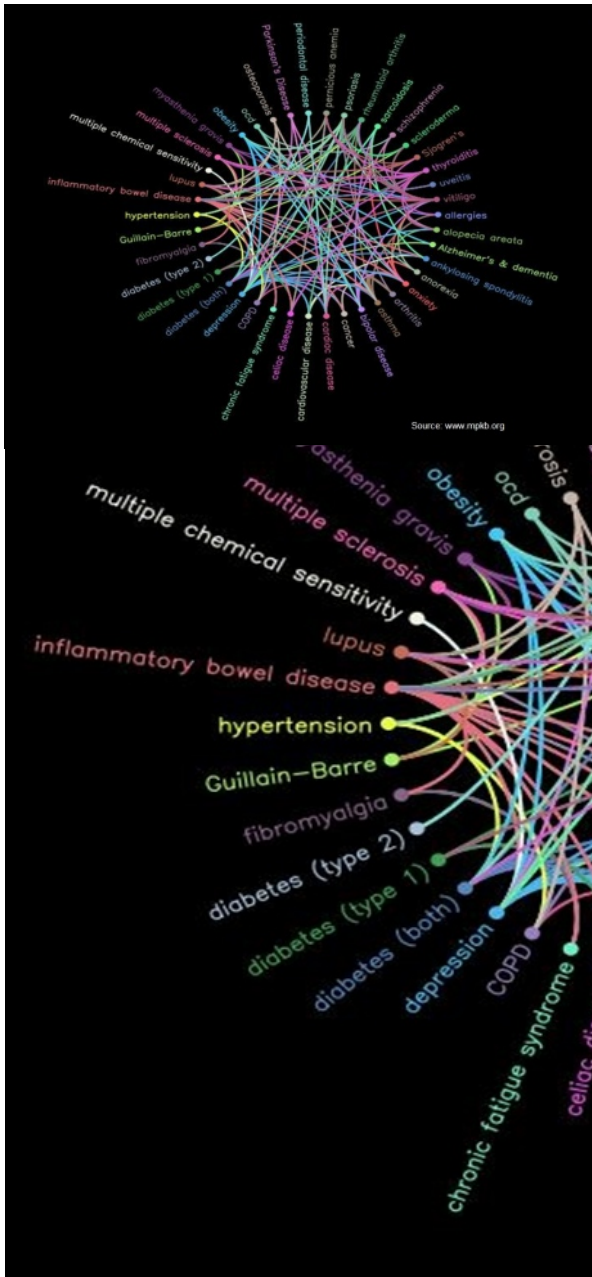
Comorbidity wheel

You will remember this picture from Professor Marshall's presentation and you will see the comorbidities.

Redefining Psychiatric and Neurologic Comorbidities as Systemic Dysfunctions

Roswitha Goetze-Pelka
Ev. Krankenhaus Bethanien
Greifswald, Germany





At first impression is that one autoimmune disease stands alone, but if you have one, the probability that you will suffer from another one is very great.

And when you see on the down side, Chronic Fatigue Syndrome (CFS), the treatment for CFS is very difficult. Often physicians do not believe their patients so what do they do? They send them to a Psychiatrist. And then, the Psychiatrist is supposed to find a therapy or at least give some comfort. That is why it is just difficult.

[Pointing to comorbidity illustration again] We see Depression. The studies show that in Europe, up to one third of the population suffers from Psychiatric illness, especially Depression, so the importance of Psychiatry will increase all the time.

And you see Schizophrenia and I will just tell about Bipolar diseases, because **Bipolar diseases are very often very complicated and have a lifetime prevalence of about 2.4 percent, which means about this moment, more than 165 million people are suffering from it. Many of them are just not discovered or not diagnosed, so the real number is far more.**

People with Bipolar diseases, that suffer from many, many comorbidities—autoimmune comorbidities—like, for instance, Diabetes is very often, hypothyroid ..., Thyroiditis, Hashimoto's Thyroiditis. And like what I have heard the first afternoon Dr Meisner from Poland told that SLE (Systemic Lupus Erythematosus) patient has a three-fold risk to die of heart attack from cardiovascular disease, and that the same number with **Bipolar diseases that have a three fold risk to die from the same diseases, like SLE.**

Guillain barre is very often; Psoriasis is very often the problem of Psoriasis in Bipolar diseases.

The first choice of therapy for Bipolar diseases are still lithium therapy. Lithium can aggravate Psoriasis in rather a severe state.

And I just want to have some sentences about how to diagnose, how the Psychiatric diagnosis is made similar to [how] Immunologists do their diagnoses. They [Immunology Specialist] just look for a pattern, a special symptom pattern, and then confer is done and specialists decide which patterns they prefer to name a disease.

The same is in Psychiatry, you have symptom clusters or special symptoms—psychological symptoms—and so you name a disease and nothing with the etiology, just the symptom cluster. So that is same in Psychiatry and in Immunology.

Fatigue

- Sarcoidosis 30 – 70% (1)
- Rheumatic Diseases 41% (2)
- Sjogren's Syndrome 67% (3)
- Primary Biliary Cirrhosis *primary predictor of QOL* (4)
- Multiple Sclerosis 74% (5)
- SLE 81%(6)
- ...

“If the problem of my fatigue were to be solved, I would be able to function normally in society in spite of my somatic problems.”

Depression

- Sarcoidosis 61% (7), 44% (8)
- Rheumatic Diseases 13 -20%, 2-3time higher than gen.pop. (9)
- Sjogren's Syndrome 32% (10)
- Myasthenia Gravis 33% (11)
- Multiple Sclerosis >50% (12), *suicide 7.5 X* (13)
- SLE 60% (14)
- Systemic Sclerosis 46% (15), 69% (16)
- ...

00:05:07

Fatigue

So, on these special diseases, I thought that it does not make any sense in symptom clusters for special symptoms which are abandoned in autoimmune diseases, and one of them named often in autoimmune diseases is often the fatigue.

And also, when a patient suffers from fatigue, she comes to this Pulmonologist, for instance, when [what] she is suffering from is Sarcoidosis, then every one of them will say "I cannot understand what you are talking about because your oxygen levels are sufficient so you cannot be deficient, fatigued, you have be good."

But fatigue is often not well understood from other physicians, so I wanted to cite a patient I met ..., and he was labeled with Psychological Schizophrenia and Intellectual Disability and what did he tell me? I wanted to help him to improve.

And then he told me, he had one wonderful song on his guitar at Christmas time, and at Christmas time I just wanted him to learn another song, but then he came to me and said "Mrs Dr, I know you can if you really want, but sometimes you just cannot want."

That is exactly what fatigue means, you just cannot want. It does not matter how much you try, because you cannot want. That is, just no energy for it.

I cite another study with a patient with extreme fatigue symptoms told, just a citation personally, "I see fatigue as a greater problem than my quantifiable somatic symptoms and imbalance. The fatigue makes me miss out on new things that I could learn to live with my somatic disabilities. If the problem of my fatigue were to be solved, I would be able to function normally in society in spite of my somatic problems."

00:07:15

Depression

Another very important symptom, a debilitating symptom of Depression.

The symptoms of Depression are the state of Depression or what you want to call it, I just wanted to give the whole picture, just see all these numbers are very high, very impressing.

Depressions are potentially very dangerous diseases for the cause the of risk of suicide, so early death, especially in the young person is rather increased.

You see the numbers, they are very high. The first, **Sarcoidosis**, they are different numbers about two thirds, and the second 44 percent was met for DSM-IV specifications for Psychiatric diseases,

Depression

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they found only 24 percent in Major Depressive Disorder (MDD)—like in Bipolar disorder, Panic, Anxiety, all of these composit disorders—but all of these together were 44 percent.

The first study is from America, and black Americans suffer from very severe cases, especially continuous cases concerning the skin, and which is of course is a marker outside for everyone to see how [marred] you become and this may perhaps, increase the feeling of depression.

The first is a study from America, and the second is a tentative study of University of Ariana Karachi from 2008.

And **Rheumatic** diseases, what you see is the numbers appear low, compared to the other diseases, but as compared to the general population, two to three times higher.

Sjogren's Syndrome, again, 32 percent;

Myasthenia Gravis, 33 [percent];

Multiple Sclerosis, again, more than 50 percent suffer from severe depressive symptoms which can precede [a somatic] diagnosis for many, many years;

and **SLE** is high [60 percent].

In **Systemic Sclerosis**—I only found [few] studies, the one was from Serbia and the other one from Iran—but there are no sample sizes but I just wanted to give you an expression of Iran.

So I just told you before it is not the real picture because the study would have said before have low sample sizes. They all differ in the methods which were used to assess these symptoms.

00:09:53

Psychiatric comorbidity increases work disability

And I already mentioned what is the functionality, and so the Psychiatric comorbidities increases work disability.

Here is one study, it mentioned Loewe [et al.], below [Source: B. Loewe et al. Psychiatric comorbidity and work disability in patients with inflammatory rheumatic diseases. Psychosomatic Medicine. 2004, 66:395-402].

When you suffer from severe cases from Rheumatoid diseases, you only have work disability from 25 percent. When you additionally have Psychiatric comorbidity, the number **doubles**.

And when you are just suffering from mild Rheumatic disease and you get Psychiatric comorbidity it is three fold from five to seventeen percent. And that is amazing!

Psychiatric comorbidity increases work disability

In patients with inflammatory rheumatic diseases:

Work disability increased

from 25% to 50% in severe cases

from 5% to 17% in mild cases

Source: B. Loewe et al. Psychiatric comorbidity and work disability in patients with inflammatory rheumatic diseases Psychosomatic Medicine 2004, 66:395-402

Psychiatric comorbidities kill

- CFS esp younger commit suicide
20% of the deaths caused by it (17)
- Psoriasis 9.7% wish to be dead
5.5% have acute suicidal ideation (18)
- MS suicide is 7.5 higher than in general population (13)

00:10:38

Psychiatric comorbidities kill

And the other [point] is that Psychiatric comorbidities can kill. When you just look at society, these are mostly very young people, they are more prone to suicide than older ones.

The first is **CFS**. This is all causes of death about a time study of 2005—all causes of death at a time of about seven years were looked at—and twenty percent of these deaths were deaths by suicide and they were younger than all the other ones.

Psoriasis has 9.7 percent wish to be dead and 5.5 percent have acute suicidal ideation.

In **Multiple Sclerosis**, suicide is even 7.5 higher than in the general population, so this is all very, very severe.

00:11:30

Plato

This thought I have is not just you, it is from Plato, I looked, it is really real, it is from the Chinese [Ojani], I do not know how you pronounce it but:

"The greatest mistake in the treatment of diseases is that there are physicians for the body and physicians for the soul, although the two cannot be separated."

So that depression which we get today, too, but today we can make studies on other levels ...

The greatest mistake in the treatment of diseases is that there are physicians for the body and physicians for the soul, although the two cannot be separated.

~Plato (427 – 347 BC)

000:11:56

[Cytokines]

Source: Cytokine-Associated Emotional and Cognitive Disturbances in Humans. Reichenberg et al. (2001)

... So this is a study, it is a collaboration from the Munich, institute of Max Planck, Munich, institution in Munich and the Hebrew University in Jerusalem and they made a wonderful study.

So what did they do? It was a double-blind cross-over study of twenty healthy male volunteers who completed psychological questionnaires and memory psychological tests after nine hours with the intravenous injection of Salmonella endotoxin, also named, which was the control group, and ... temperature and heart rate were monitored continually.

Source: Cytokine-Associated Emotional and Cognitive Disturbances in Humans Reichenberg et al. (2001)

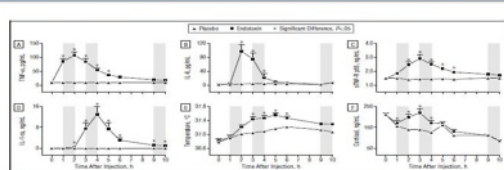


Figure 1. Changes over time (mean ± SEM) in the plasma levels of tumor necrosis factor- α (TNF- α) (A), interleukin (IL)-6 (B), soluble TNF receptor p55 (a very soluble pattern was obtained for soluble TNF receptor (sTNF) (C)), IL-1 receptor antagonist (D), rectal temperature (E) and cortisol (F). All measures showed a significant difference ($P < 0.05$) (A–D). Shaded areas indicate the times when there were significant differences.

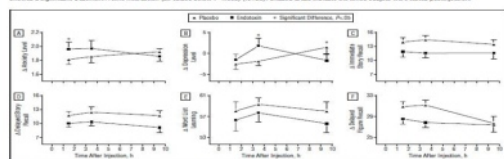


Figure 2. Endotoxin-induced changes over time (mean ± SEM) in emotional and memory parameters (E–J). The effects of endotoxin on anxiety levels (A), depressed mood (B), depressive stress (C), delayed sleep phase (D), Word List Learning (E), and delayed figure recall (F) were measured at 1, 2, and 9 hours after with or without or placebo injection.

Source: Cytokine-Associated Emotional and Cognitive Disturbances in Humans Reichenberg et al. (2001)

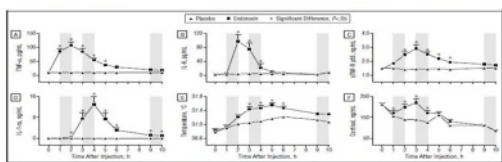


Figure 1. Changes over time (mean ± SEM) in the plasma levels of tumor necrosis factor- α (TNF- α) (A), interleukin (IL)-1 (B), soluble TNF receptor p55 (C) in very early infection (mean ± SEM) in TNF- α (D), IL-1 (E), IL-6 (F), IL-10 (G), IL-12 (H), IL-18 (I), IL-15 (J), IL-17 (K), IL-21 (L), IL-22 (M), IL-23 (N), IL-24 (O), IL-25 (P), IL-26 (Q), IL-27 (R), IL-28 (S), IL-29 (T), IL-30 (U), IL-31 (V), IL-32 (W), IL-33 (X), IL-34 (Y), IL-35 (Z), IL-36 (AA), IL-37 (AB), IL-38 (AC), IL-39 (AD), IL-40 (AE), IL-41 (AF), IL-42 (AG), IL-43 (AH), IL-44 (AI), IL-45 (AJ), IL-46 (AK), IL-47 (AL), IL-48 (AM), IL-49 (AN), IL-50 (AO). All measures showed a significant treatment \times time interaction (all values below $P < .005$) ($N = 20$). Shaded areas indicate the times subject were socialized.

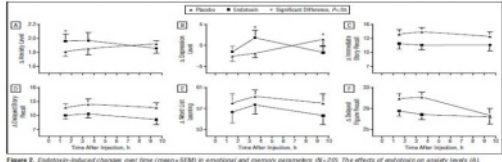


Figure 2. Endotoxin-induced changes over time (mean ± SEM) in emotional and memory parameters ($N = 20$). The effects of endotoxin on anxiety levels (A), depressed mood (B), somnolence (C), impaired short-term memory (D), impaired long-term memory (E), word list learning (F), and digit span (G) were measured at 1, 2, 4, and 8 hours after either exposure to endotoxin or saline.

But what I want to show you, I'm not sure you can see it, after two hours the anxiety levels increased. The depression levels, in the middle, they increased later on. And memory functions, a different kind of memory, they decreased.

But you activate your immune system, what happens rather immediately, you become anxious—even a healthy person. And your state, your depression—depression means you become slow—you feel depressed, you feel tired and your memory functions decrease.

00:13:30

The Evolutionary Point of View

What is necessary? You need to change your behavior.

This is what I just came up with, the evolutionary point of view:

The immune system fights infections by activating cytokine cascades and by modifying emotions, memory and behavior.

While killing infectious agents we become tired and weak--this is "sickness" behavior, but to survive this sickness behavior we have to change our behavior—we need to hide and seek protection and care to survive.

So anxiety is a helpful evolutionary point because it is what makes us change our behavior to survive.

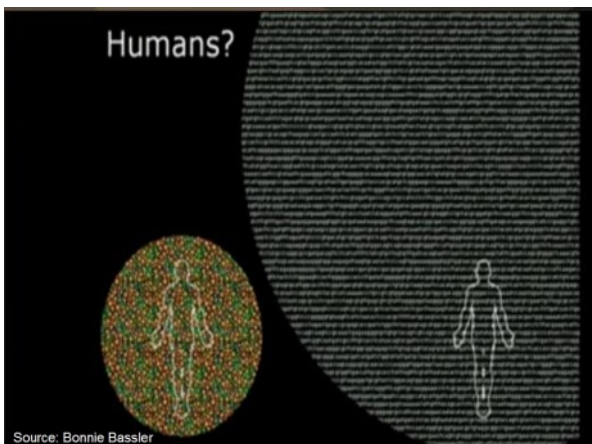
These cytokines and immune system change behavior and protects those when you see ill people, and animals even more—when they smell illness and they can smell illness—they just avoid the contact, so they change their behavior. And we know that when the smell differs, how our reactions we can measure different cytokine patterns so it is very interesting.

00:14:39

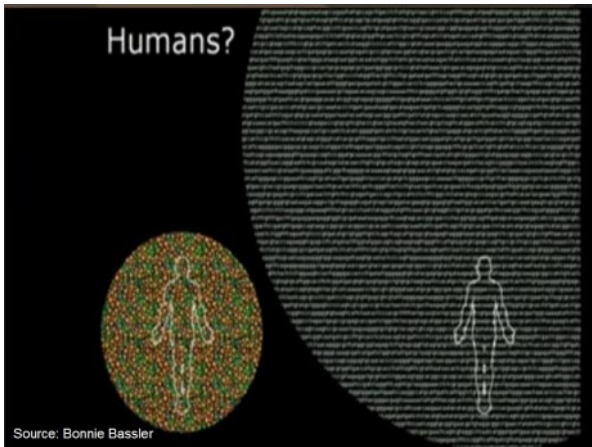
Humans?

So what I need to tell you is from SALK, this is a picture from Bonnie Bassler from Princeton University, this is information from a TED talk.

It gives the relation between the bacterial cells and human cells and here again is one to ten on one side and the [other] side is one to 100.

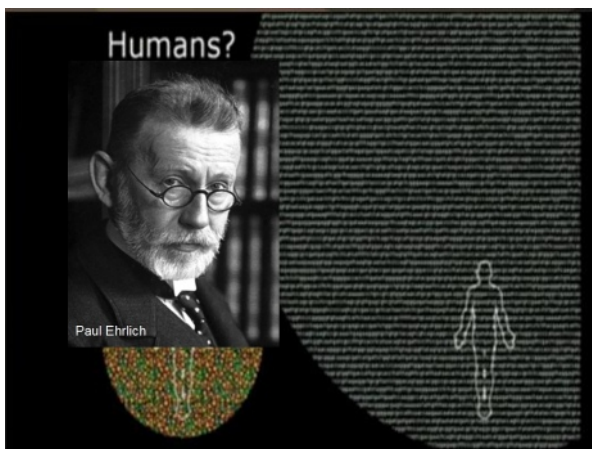


Source: Bonnie Bassler



This means what happens to this little man [pointing] is one to one hundred, because when you suppress the immune system, the immune system activates so many problems and when you adjust the immune system it will adjust change.

“When you adjust the immune system it will adjust change.”



00:15:11
Humans? Paul Ehrlich

This is Paul Ehrlich, he created the name holotoxin when he said holotoxical immune system is very, very potent—attacks itself.

The question is this comfortable, this imagination model, autoimmune system that attacks the body, is this a comfortable concept of evolution we have today?

I think it is *not* comfortable yet and we have to think about our models for many good reasons.

To suppress
Or not suppress
The immune system
That is the question.....

With thanks to W. Shakespeare

00:15:38
[The question is...]

To suppress or not to suppress the immune system. That is the question....

Immunostimulation with the Marshall Protocol
2 case histories

- 1: Sarcoidosis: Female, 55a, **symptoms for 10 years, diagnosed in 2005 with progressive sarcoidosis. Lung fibrosis, lesion in the pons region.** Hot flushed, pain and swelling of joints, pain and weakness of muscles, headache, temporary paraesthesia, lymphnodes, increasing fatigue, memory problems. Prednisolone started in Apr.2006. Palliation of pain, fatigue decreases for only 1 month. After ½ y prednisolone discontinued. Symptoms worsened. Again prednisolone + MTX. Less pain, other symptoms worsened. **Retired in Apr. 2007. Start of MP July 2007.** Episodes with immunopathology and more symptoms are followed by those with less symptoms. 1 step back, 2 steps forward. After ½y memory and concentration improves. Episodes with fatigue, weakness shorten. **Started to work, fulltime, again in July 2011.** Olmesartan still needed for palliation of immunopathology.

00:15:53
Immunostimulation with the Marshall Protocol
2 case histories, 1

I think what Professor Marshall said to activate the immune system with the Marshall Protocol, with olmesartan to activate the VDR receptor.

Here was just a person with Sarcoidosis, who suffered and was tired and after some time on Marshall Protocol activating VDR with olmesartan, she came back to work full time office in Real Estate.

Very improbable before, but it is just amazing to see this.

Immunostimulation with the Marshall Protocol 2 case histories

- **2) Multiple Sclerosis:** Female, 38 y. Migraine accompag. since childhood. **Since beginning 1990s episodes with depression, esp with fatigue,** and problems to concentrate. One lasted 2.5 years. Episodes with paraesthesia. In **Sep. 2007 med. diagnosed episode with double pictures, vertigo, massive fatigue.** Dec. 2007 Nervusopt. neuritis and fatigue. **June 2009 again N.opt. neuritis and fatigue.** Starts to avoid sunlight and VitD. **Oct.2009 MP medication. Fatigue and problems to concentrate diminish and disappear in weeks.** Jan 2011 3 short bouts with N.opt neuritis, shorter than the years before. Some days fatigue. Feb and Mar 2011 short episodes with N.opt neuritis, since then 40% reduced field of vision. No fatigue. Able to work fulltime. No fatigue, no depression. No migraine any more.
NMR Jun 2008: several MS typical lesions.
NMR July 2011: no additional lesions.

Translational approach

- **Evidence has been given that immuno-stimulation by activating the VDR improves autoimmune diseases with their comorbidities.**
- It is based on a **comprehensive disease model** which implicates and can explain all features of autoimmune diseases.
- It obviously **normalizes/restores the immune repertoire.**
- **It harnesses the innate immune system.**
- The MP offers a rather **safe and affordable therapy** for chronic diseases which otherwise will overwhelm every health system and society because of increasing numbers and costs in an aging population.
- Well designed clinical studies are needed to improve this therapy, which additionally offer the chance to gain more insights in how the **human** immune system works on cellular, and molecular level.
- Collaboration between different medical specialties **and** basic sciences is needed to use this chance to learn more about the **human** immune system, about health, and diseases.

00:16:21

Immunostimulation with the Marshall Protocol 2 case histories, 2

Another case was Multiple Sclerosis. She suffered years before the diagnosis was seen. She suffered from fatigue, nerves, optic neuritis and after a short time, especially the psychiatric comorbidities became normal again.

00:16:42

Translational approach

And this is the translational approach we need today.

So regarding this Marshall Protocol, just activated the VDR as antigens.

It has been given that immunostimulation by activating the VDR improves autoimmune diseases with their comorbidities, especially the psychiatric comorbidities that we saw early on in the treatment protocol.

It is based on a comprehensive disease model which was already explained by Trevor Marshall, and put at large today.

I just put these sentences from Mr Covary... (implicates and can explain all features of autoimmune diseases), it obviously normalizes/restores the immune repertoire. It harnesses the innate immune system. That is what it obviously does.

The MP offers a rather safe and affordable therapy for chronic diseases which otherwise will overwhelm every health system and society because of increasing numbers and costs in an aging population.

What we need is well designed clinical studies are needed to improve this therapy which additionally offer the chance to gain more insights in how the human immune system works on cellular and molecular level.

Collaboration between different medical specialties and basic sciences with this translational approach is needed to use this chance to learn more about the human immune system, about human health, and diseases.

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[References]

I hope I was quick enough to read, enclosed is literature and references.

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[References continued]

Thank You and Take Care

00:18:11

Thank You and Take Care

“The greatest mistake in the treatment of diseases is that there are physicians for the body and physicians for the soul, although the two cannot be separated.”

Plato (427–347 BC)