

Morgellons Medical Conference, Austin Texas 2010

Notes made from presentation by Dr Randy Wymore - Oklahoma State University outlining research carried out to date.

- Morgellons is a real pathology, causing CNS changes
- Callus on sufferer skin are not 'normal pressure calluses'
- The hair has branched structure in lower hair shaft, only found in Morgellons
- Large numbers of translucent fibres are associated with coloured/dark fibres involved.

Research testing: Bacterias & fungi

Culturing of bacteria and fungi from the following samples; skin, fibres, scabs, hair, black specs:

Culturing conditions (varying the following combinations).

- Aerobic/anaerobic
- High/low saline
- Temp 37/24/20/4 C
- PH 4.5 - 8.5
- Light/dark
- Shaking/stationary
- Humidity

Bacterial media:

- LB agar & liquid
- Blood agar
- Chocolate agar
- HEA agar
- Marmitol agar
- Soy agar
- Nutrient agar
- Chicken stock

Fungi media:

- Sabouraud media
- Hay infusion agar
- Potatoe dextrose agar
- Malt extract agar

For each culture above multiple stains/conditions were used:

- Wet mount (no stain)
- Heat fixed (no stain)
- Gram stain
- Acid fast staining
- Gentian violet
- Schaeffer-fulton stain
- Lactol-phenol blue

Kits then used to characterize some of the enzymatic properties, eg reaction to H₂O₂, to identify bacteria. Some DNA sequencing also done.

Results

Bacterias found were:

E.coli, **Nocardia**, Staphylococcus, Streptococcus, **Corynebacteria**, Pseudomas, **Clostridium**

All of the above bacterias found were also found in control population at similar levels. Bacteria in **bold** were elevated in Morgellon samples, but not significantly.

Fungi found were:

Aspergillus, Candida albicans, Ringworm causing fungi, **true yeasts**

Research testing: Fibres

Fibre analysis 2009 is ongoing. Fibres are being analysed by:

- SEM & TEM (fixing and mounting)
- Commercial labs conducting: FTIR, Raman Spectroscopy, Atomic force microscopy, Proton induced x-ray emission (PIXE), Inductively coupled plasma, Mass spectroscopy (ICPM).

Results to date:

Morgellon fibres are organic compounds, unusually heat resistant.

Red and blue morgellon fibres were not coloured or dyed - ie The colour can not be removed or extracted with detergents or solvents, unlike textile fibres.

Research testing: DNA testing

Morgellon samples; skin, fibres, scabs, hair, black specs have been run through PCR to compare against DNA sequence of all major pathogens and parasites. No further results matched, other than the bacterias and fungi found above.

DNA shot gun sequencing will commence when funding available.

Comment by Dr Stricker - We can only run DNA and compare against organisms known, that have had genome mapping.

Even though the above research has yielded little, in terms of a specific cause, Dr Wymore believes the pathogen/organism causing Morgellons will be identified with further research.