Pathoanatomy vs Psychosocial– Back to the Future?

With Dr Mark Laslett, Dr Angela Cadogan & Flavio Bonnet

On the 18th March 2019, Dr Mark Laslett and I were involved in a live social media discussion about the relationship between patho-anatomic diagnosis and psychosocial factors hosted by Flavio Bonnet from the Agence EBP.

We streamed live on Facebook, Twitter and Instagram (in English) from Christchurch, New Zealand. The event was viewed by more than 7,500 people from around the world.

We discussed four main topics. In this series I have provided a summary of the transcript for each topic.

1. Is it possible to make a diagnosis?
2. Does the pathoanatomic approach ignore the psychosocial aspect of the pain experience?
3. What do you say to colleagues who say that diagnosis does not change treatment?
4. How does imaging relate to diagnosis?

Link to video on Twitter: https://twitter.com/marklaslett_NZ/status/1107733389300240384

General Questions from Social Media

How do you interpret the results of randomised trials when they include such a wide spectrum of patients?

- *(ML)* RCTs assume that you are treating a single condition with a single treatment.
  - They give you a mean (average) value of changes.
  - If you have two different causes of pain in your trial, one responds and one doesn't, they cancel each other out.
  - This means the intervention is effective for one group of patients but not for another. The RCT 'conclusion' is therefore that there is no treatment effect. But that's incorrect.
  - The RCT design doesn't allow you to extract information about patients who 'get better' and those who don't.
- What's more, a systematic review is simply an average of averages ("Garbage in, garbage out").
- *(AC)* agree totally with Mark. RCTs give no indication of individual response variations. There are usually individuals in every RCT who 'respond' (responders) and those who don't respond ('non-responders').
- Be particularly careful when interpreting results of RCTs in subacromial impingement:
  - The diagnostic criteria are hugely variable.
  - Many use imaging findings as inclusion criteria that may not be symptomatic.
  - Very few confirm a subacromial pain source using diagnostic injection.
  - Many continue to use the Hawkins-Kennedy test which has poor specificity for subacromial pathologies.