European Crohn's and Colitis Organisation

Results of the Sixth ECCO Scientific Workshop

The Pathogenesis of Inflammatory Extraintestinal Manifestations of Inflammatory Bowel Disease - Implications for Research, Diagnosis and Therapy.

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Disclosure of Conflicts of Interest:

Conflict of interest :

Ferring // Lecture at educational meeting

Takeda // Lecture at educational meeting

Janssen // Lecture at educational meeting

Pfizer // Advisory Board

Abbvie // Consultancy

Background

- 50% of patients get an EIM
- Pathogenesis not understood
- Potential to illuminate pathogenesis of IBD
- New perspectives

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ECCO Guideline/Consensus Paper

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ECCO Guideline/Consensus Paper

The First European Evidence-based Consensus on Extra-intestinal Manifestations in Inflammatory Bowel Disease

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Methods

- 21 Participants
  - 15 ECCO gastroenterologists
  - 1 Immunologist
  - 1 Rheumatologist
  - 2 Ophthalmologists
  - 2 Dermatologists
  - 18 Institutions
  - 11 Countries
- Two groups
  - Group 1: Critical appraisal of the scientific evidence supporting a range of proposed pathogenic mechanisms of EIM
  - Group 2: Strategies and clinical tools that could be employed in future research in EIM.
  - Both groups: Unanswered questions in the field of EIM

Picture courtesy of S Vavricka *et al.*

What is an EIM?

Arthropathy and arthritis
- Axial - Peripheral/ enthesitis
- Type I – Type II

Metabolic bone disease (osteoporosis)
- Nutrition
- Drugs

Eye disease
- Anterior uveitis
- Episcleritis/ scl

Oral, aural and nasal disease
- Sensorineural hearing loss
- Met

Skin disease
- Erythema nodosum
- Pyoderma gangrenosum
- Sweet's syndrome
- Hidradenitis suppurati
- Anti-TNF induced skin inflammation

Urogenital manifestations of IBD
- Nephrolithiasis
- Amyloidosis
- Tubulo-interstitial nephritis
- Drug-induced

Hepato-pancreato-biliary disease
- PSC
- NAFLD
- PV thrombosis
- Hepatic amyloidosis
- Hepatic abscess
- Hepatic granuloma
- Chronic pancreatitis
- Peripheral neuropathy
- Vasculitis
- Stroke
- Myelopathy

Cardiovascular manifestations of IBD
- Ischemic heart disease
- Cardiomyopathy
- Pericardial effusion
- Pulmonary embolism

Pulmonary manifestations of IBD
- Large airway inflammation/ COPD
- Interstitial penumonia
- Drug induced

Coagulopathy in IBD
- VTE

An inflammatory pathology in a patient with IBD that is located outside the gut whose pathogenesis is either dependent on an extension or translocation of immune responses from the intestine, or is an independent inflammatory event that shares a common environmental or genetic predisposition with IBD

Pathogenic pathways

- Immunological mechanisms in EIMs
  - Extension of immune responses from the intestine.
  - EIM as independent inflammatory events
- Dysbiosis and gut microbiota
- Genetic basis of EIMs
- Animal models of EIMs
- Implications of the therapeutic effect of biologics and other treatments for EIMs

Clinical research

- Documentation of effects of drugs in all bodily systems in drug trials in inflammatory diseases
- What should future clinical trials in EIMs look like?
- What
  - Definitions
  - Diagnostic criteria
  - Monitoring
  - Outcomes
- of EIMs should be used in clinical practice and clinical trials to ensure they produce meaningful and consistent data?

Open Questions

- Are there risk genes for EIMs in general or only specific EIMs, or both?
- Are there microbiota that cause EIMs? Directly (e.g. molecular mimicry) or indirectly (e.g. microbiota-derived metabolites)?
- Does the presence of an EIM affect optimal drug choice? Optimal drug dose? Optimal trough levels?
- Does Treat to Target apply in IBD patients with EIMs? What is the target?