















- organ-specific mechanisms associated with tissue fibrosis. *Am J Physiol Cell Physiol* 2013;304:C216-25.
26. Flynn RS, Murthy KS, Grider JR, Kellum JM, Kuemmerle JF. Endogenous IGF-I and alphaVbeta3 integrin ligands regulate increased smooth muscle hyperplasia in stricturing Crohn's disease. *Gastroenterology* 2010;138:285-93.
  27. Geboes KP, Cabooter L, Geboes K. Contribution of morphology for the comprehension of mechanisms of fibrosis in inflammatory enterocolitis. *Acta Gastroenterol Belg* 2000;63:371-6.
  28. Sappino AP, Schürch W, Gabbiani G. Differentiation repertoire of fibroblastic cells: expression of cytoskeletal proteins as marker of phenotypic modulations. *Lab Invest* 1990;63:144-61.
  29. Chamley-Campbell J, Campbell GR, Ross R. The smooth muscle cell in culture. *Physiol Rev* 1979;59:1-61.
  30. Smith P, Heath D, Yacoub M, Madden B, Caslin A, Gosney J. The ultrastructure of plexogenic pulmonary arteriopathy. *J Pathol* 1990;160:111-21.
  31. Rensen SSM, Doevendans PAFM, van Eys GJJM. Regulation and characteristics of vascular smooth muscle cell phenotypic diversity. *Neth Heart J* 2007;15:100-8.
  32. Chan MC, Hilyard AC, Wu C, Davis BN, Hill NS, Lal A, et al. Molecular basis for antagonism between PDGF and the TGFbeta family of signalling pathways by control of miR-24 expression. *EMBO J* 2010;29:559-73.
  33. Chan MC, Nguyen PH, Davis BN, Ohoka N, Hayashi H, Du K, et al. A novel regulatory mechanism of the bone morphogenetic protein (BMP) signaling pathway involving the carboxyl-terminal tail domain of BMP type II receptor. *Mol Cell Biol* 2007;27:5776-89.
  34. Nair DG, Miller KG, Lourenszen SR, Blennerhassett MG. Inflammatory cytokines promote growth of intestinal smooth muscle cells by induced expression of PDGF-Rβ. *J Cell Mol Med* 2014;18:444-54.
  35. Di Mola FF, Friess H, Scheuren A, Di Sebastiano P, Graber H, Egger B, et al. Transforming growth factor-betas and their signaling receptors are co-expressed in Crohn's disease. *Ann Surg* 1999;229:67-75.
  36. Flynn RS, Mahavadi S, Murthy KS, Grider JR, Kellum JM, Akbari H, et al. Endogenous IGFBP-3 regulates excess collagen expression in intestinal smooth muscle cells of Crohn's disease strictures. *Inflamm Bowel Dis* 2011;17:193-201.
  37. Babyatsky MW, Rossiter G, Podolsky DK. Expression of transforming growth factors alpha and beta in colonic mucosa in inflammatory bowel disease. *Gastroenterology* 1996;110:975-84.
  38. Scarpa M, Bortolami M, Morgan SL, Kotsanou A, Ferraro S, Ruffolo C, et al. TGF-beta1 and IGF-1 production and recurrence of Crohn's disease after ileocecal resection. *J Gastrointestinal Surgery* 2008;12:1981-90.
  39. Del Zotto B, Mutilato G, Pronio AM, Montesani C, Frisigni R, Boirivant M. TGF-β1 production in inflammatory bowel disease: differing production patterns in Crohn's disease and ulcerative colitis. *Clin Exp Immunol* 2003;134:120-6.
  40. Suekane T, Ikura Y, Watanabe K, Arimoto J, Iwasa Y, Sugama Y, et al. Phenotypic change and accumulation of smooth muscle cells in strictures in Crohn's disease: relevance to local angiotensin II system. *J Gastroenterol* 2010;45:821-30.
  41. Ahmed T, Rieder F, Fiocchi C, Achkar JP. Pathogenesis of postoperative recurrence in Crohn's disease. *Gut* 2011;60:553-62.
  42. Achkar JP, Hanauer SB. Medical therapy to reduce postoperative Crohn's disease recurrence. *Am J Gastroenterol* 2000;95:1139-46.
  43. Graham M F, Diegelmann R F, Elson C O, Lindblad W J, Gotschalk N, Gay S, et al. Collagen content and types in the intestinal strictures of Crohn's disease. *Gastroenterology* 1988;94:257-65.
  44. Shelley-Craser G, Borley NR, Warren BF, Shepherd NA. The connective tissue changes of Crohn's disease. *Histopathology* 2012;60:1034-44.
  45. Bailey AJ, Bazin S, Sims TJ, Le Lous M, Nicoletis C, Delaunay A. Characterization of the collagen of human hypertrophic and normal scars. *Biochim Biophys Acta* 1975;405:412-21.
  46. Ohlsson B, Veress B, Lindgren S, Sundkvist G. Enteric ganglioneuritis and abnormal interstitial cells of Cajal: features of inflammatory bowel disease. *Inflamm Bowel Dis* 2007;13:721-6.

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