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**Grant awarded £79,809 (2 Years)**

***Platelet-Leucocyte Aggregation in Inflammatory Bowel Disease***

The cause of IBD is unknown, but recent evidence suggests that inflammatory cells in the blood, leucocytes and platelets (which also cause thrombosis), help produce damage in the gut wall. We have previously shown that there are increased numbers of activated platelets in the blood of patients with IBD, and that treatment with 5-ASA drugs, which are commonly used in IBD, decrease this activation. Very recently, we have found that the blood of patients with IBD shows increased formation of clumps ('aggregated') of platelets and leucocytes: these aggregates may be even more inflammatory than either cell type alone. In this research, we plan to clarify which IBD patients have platelet-leucocyte aggregates, to find out where in the body and how these form, and lastly, to study their effects on leucocyte function and blood vessel wall cells in the laboratory. It is hoped that the work will tell us more about mechanisms of gut damage in IBD, and conceivably identify new possible approaches to therapy.