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The full report is titled “Brief Communication: Duration of Platelet Dysfunction after a 7-Day Course of Ibuprofen.” It is in the 5 April 2005 issue of *Annals of Internal Medicine* (volume 142, pages 506-509). The authors are N.A. Goldenberg, L. Jacobson, and M.J. Manco-Johnson.

## Platelet Function after Taking Ibuprofen for 1 Week

### What is the problem and what is known about it so far?

Ibuprofen is a nonsteroidal anti-inflammatory drug (NSAID). Many people take ibuprofen or other NSAIDs for headache, musculoskeletal problem, and other types of pain. Platelets are the blood cells that help the blood to clot. Ibuprofen and other NSAIDs may affect the way platelets work and could interfere with normal blood clotting. Blood clotting is very important during surgery, so many doctors advise patients to stop taking ibuprofen and other NSAIDs at least 1 week before surgery. However, the effect of NSAIDs on platelets is temporary. No studies directly support the recommendation to stop the drugs 7 days before surgery.

### Why did the researchers do this particular study?

To see how long it took platelets to work normally after people stopped taking ibuprofen.

### Who was studied?

11 healthy adult volunteers. These volunteers were not scheduled to have surgery.

### How was the study done?

The volunteers took ibuprofen, 600 mg by mouth, every 8 hours for 7 days and then stopped taking the drug. The researchers tested platelets before the participants started taking ibuprofen and again 40 minutes, 8 hours, and 24 hours after they stopped taking the drug. The researchers tested platelets by measuring the ability of platelets to stick together (platelets need to stick together for normal blood clotting).

### What did the researchers find?

All of the volunteers had normal platelet function before starting ibuprofen. Of the 11 volunteers, 7 had abnormal platelet function 40 minutes after the last dose of ibuprofen. However, all patients had normal platelet function 24 hours after the last ibuprofen dose.

### What were the limitations of the study?

This study measured a test of platelet function in healthy volunteers rather than bleeding during surgery in actual patients. The researchers studied only ibuprofen, and the results may not apply to other NSAIDs.

### What are the implications of the study?

Platelet function normalizes within 24 hours of the last dose of ibuprofen in healthy volunteers. This suggests that it may not be necessary for people who take ibuprofen to stop it a week before surgery.

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