values are substantially distinct, although both are excellent indicators of aspirin's effect, so it was reasonable to compare them. As shown in Figs 6A,B, there was a moderate correlation between the 2 PATI values for collagen at both baseline and on day 14, whereas the values for ADP were well correlated (Figs 6C,D). One of the reasons for that finding could be that most of the whole-blood PATI values for collagen were distributed in a much narrower range than the PRP-PATI values. The influence of other blood cells on aggregation, which might have the effect of keeping collagen-induced whole-blood aggregability relatively constant both before and after aspirin intake, might also play a role. Further investigation is required to clarify this matter.

The ability of aspirin to inhibit platelet function varies widely among individuals in analyses using the optical aggregometer. It has been reported that platelets with a diminished response to aspirin intake are associated with a higher cardiovascular risk, a phenomenon called as 'aspirin resistance'[3,16,17] Researchers have not reached a consensus on the definition of aspirin resistance and the prevalence varies between 5% and 60% in the reports![17] In the present study, aspirin's effects also varied among individuals, and in some subjects blood aggregability after aspirin intake remained within the range of that prior to aspirin intake. These subjects could be aspirin-resistant. If we define the normal range of aggregability before aspirin intake as between the 5th and 95th percentiles, the prevalence of aspirin resistance detected by the maximal aggregation rates, the PRP-PATI and the whole-blood PATI for collagen is 14.2%, 8.6% and 5.7%, respectively.

The ADP receptor inhibitor, clopidogrel, is an essential drug used in coronary stenting. Clopidogrel-resistant patients have also been recognized and the importance of a monitoring system acknowledged![18,19] We consider that whole-blood analysis by the SFP-method may be a good candidate for that as well.

In conclusion, the PRP-PATI and whole-blood PATI for collagen quantify platelet aggregability before and after aspirin intake in a fashion similar to, or perhaps even superior to, maximal PRP aggregation rates. Furthermore, the whole-blood PATI for collagen may be especially useful for monitoring aspirin's effect on platelets because it is easier to measure without the centrifugation procedure required for preparation of PRP. This is a new finding shown in Japanese subjects; however, whether the results derived from healthy volunteers are directly applicable to actual patients with cardiovascular disease is unknown and deserves further study.

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