

## Aspirin Questions and Academy Answers

Since releasing the Aspirin Diagnostic and Instruction Tool (ASA Dx tool) in August 2007, the Academy has fielded a number of questions regarding its use and rationale. This section contains some of the more frequent and important questions about the administration of aspirin (ASA) at dispatch, along with answers directly from the Academy.

### Topic: Benefit of pre-arrival administration of aspirin

**Question:** Is there any evidence that giving ASA prior to EMS arrival is of benefit over waiting until EMS arrives and gives it?

**Academy Answer:** The Academy received multiple Proposals for Change to add aspirin administration at dispatch. Initially, with v11.3 there was some medical opposition to including it (a small percentage based on potential exacerbation of internal bleeding), and that was the reason it did not come out as an imbedded part of that protocol at that time. Once revisited by the Council of Standards, the decision was made to make it a medical control option to authorize it or not.

While the Academy is not aware of any outcome data stating that dispatch administration increases survival, it does make sense that earlier administration is better than, if not equivalent to, waiting for responders. The Council of Standards felt that the combination of the response time, arrival to patient contact time, patient scene evaluation time, and then potential administration of ASA could be shortened by dispatch administration. It has been reported that even in good EMS systems with ASA administration policies, 10 to 30 percent of eligible patients never get ASA. Use at dispatch would better standardize ASA administration (via protocol) and provide it sooner (considerably sooner in long response times, responder unavailability situations, and rural areas). The Academy received unofficial support from its advisors at AHA, ECCC, and ILCOR to move forward.

The Academy has also received support from its standards experts in all other countries where the Academy is currently preparing or implementing translations, including the UK, Australia, New Zealand, Canada, Germany, Austria, Italy, and Azerbaijan. Since the Academy takes a unified multi-country view of dispatch-provided patient care, even a small percentage increase in proper administration of aspirin could affect thousands of at-risk people worldwide. Dr. Paul Stiegler, medical director for Dane County and one of the world's few EMD-Instructor physicians, stated, "The ability of pre-prehospital personnel to provide aspirin by protocol to patients with

acute coronary syndromes will markedly improve the consistency and timeliness of its administration."

When considering that sooner should be better, the general comment we got from our experts was, "Then why not?" There is also a dearth of medical control in many smaller systems and police-controlled systems. The Academy, by creating a standard to apply across the hodgepodge of medical physician involvement in these systems, would simplify and move forward such needed care.

### Topic: Data proof of dispatch aspirin administration success?

**Question:** I am trying to convince my administration to use the ASA Dx tool. Is there any research or data showing a positive outcome?

**Academy Answer:** There is virtually no data on this, although it is estimated that about 1,000 sites in the U.S. and Canada are using the ASA Dx tool. While we have a dozen or more pre-implementation queries about "what if" and standard-of-care based concerns, we have received no negative reports on its actual use—no real clinical issues.

Regarding research and positive outcomes, we don't believe that this can really be studied since so many variables exist. Time frames between administration at dispatch versus waiting until responders arrive at the scene could be studied, but it would only show the time advantage of dispatch administration, not end outcome improvement. That would take an enormous and very complicated study.

If Bayer Aspirin Company is advising earlier administration of ASA, it must be better, right? We are essentially doing the same thing. One thing that also would be interesting to know (that could potentially be captured) is how often the caller advises the EMD that the patient had just taken an aspirin and therefore doesn't need one. This could potentially be added to the ASA Dx tool.

Sorry not to be able to provide any death-defying data (so to speak). One advantage to dispatch administration is that it's strictly driven by protocol. Scene and hospital are not driven by protocol, and aspirin administration does get missed at these points—this has been reported. We are just taking out the middlemen at an earlier time.

Brett Patterson, Chair of the Council of Research, adds:

*Although there is little data available from a dispatch standpoint, it is important to note that this is very new to dispatch. With that said, there is considerable*

*evidence regarding the benefits of early aspirin administration for Acute Coronary Syndrome, so much so that ILCOR/AHA now advises that administration should be advised by dispatch for patients over 16 with chest pain and not allergic to ASA. The benefits of early administration far outweigh the miniscule risk of ingesting what amounts to be one half of the therapeutic, over-the-counter dose for a headache.*

### Topic: Medical directors disagree

**Question:** If our 9-1-1 center's medical director signs off on the ASA Dx tool, but a local EMS service medical director or EMS service disagrees with using it for their service area, how is this resolved?

**Academy Answer:** If a conflict exists between the center's and the local system's medical directors, the Academy suggests the following:

1. They need to physically meet and try to resolve the issue.
2. In the event that the center's doc still says yes and local doc still says no, the communications center would be in a quandary—and possibly a legal one—wherein it would need to be determined, at the dispatch point in time, who has the actual responsibility for the pre-arrival 9-1-1 patient care. It might be wise to involve legal counsel and/or engage in a thorough review of the enabling documents for both medical directors' authority, scope, and ultimate power. In most systems, the EMS management leadership really has that power, not the medical director, who may be, authoritatively, little more than an expert advisor. The number of possibilities here are mind-boggling.
3. The county attorney might be asked to resolve these issues if actually encountered.

While this is a very interesting “what if” situation, the ASA Dx tool has been in effect since August 2007. Until we actually encounter this conflict, we will continue to march forward through the salicylate fog . . .

### Topic: Customization of the aspirin protocol

**Question:** I am a physician and the medical director for my fire department located in New York. Do you have a modified version of the ASA Dx tool that conforms to the New York State aspirin protocol that is taught to all New York State EMTs? It is very similar to yours, but it also has exclusions if the patient is already using aspirin or warfarin (Coumadin®).

**Academy Answer:** The Academy's Council of Standards reviewed many ideas, concerns, and variations during the development of the ASA Dx tool. As part of a unified protocol system—that is, one that's the same in all centers in all places the protocol is used in the world—there are no alternative versions for any area among the 3,000 that may elect to use it.

In consultation with the Academy's medical experts at AHA, it was determined that concurrent use of warfarin (Coumadin®) should not be a significant concern for a one-time, single-dose administration of ASA. The issue of a patient already being on aspirin was also addressed. The experts' advice was that even if the patient was on current ASA therapy, the single aspirin dose should be given. It was even noted that many of these patients have significant aspirin resistance and that a single additional dose would do no significant harm.

While there will certainly be differences of medical practice from doctor to doctor, state to state, and country to country, the Academy's position is to create a unified, supportable, safe, and effective protocol that can be learned and administered by its 50,000 EMDs uniformly throughout the world. While the Academy attempts to pattern its protocols after science recommended by other leading, standard-setting organizations, in the end it can only support a single method, maintained until further science and data is provided.

### Topic: Liability concern

**Question:** In the event that a dispatcher fails to reference the ASA Dx tool (for example, while referring to the unfamiliar cardset backups during a computer failure), will this constitute a breach in following the standard of care? And if there is an adverse outcome as a result of failure to follow a set standard of care, could this open us to litigation?

**Academy Answer:** While the scenario described is possible, one has to decide if the very unlikely liability risk is outweighed by the potential good. The training received by your agency requiring each EMD to read the ASA training booklet that accompanied the protocol inserts should reduce the likelihood of bad things happening. ProQA almost never fails, although there are a lot of reasons why CAD or power could fail. One could place the ASA Dx tool card to show over the top of the Additional Information on Protocol 10 as a reminder when backup cards might need to be used.

Finally, in 29 years of use in now more than 3,000 centers in 23 countries, there has yet to be a formal lawsuit involving the correct use of the MPDS. From an ethical

standpoint, given the rarity of legal proceeding in MPDS centers, would withholding aspirin use on a very “what if” situation be warranted? We hope this helps to evaluate the real-life application of your insightful question.

**Topic: Caller is a clinic nurse**

**Question:** If the call comes from a nurse at a clinic, should we go through the ASA Dx tool or just make sure we mention it in a politically correct way? You know those tough nurses.

**Academy Answer:** Nurse or not, ask the questions—just be tactful. Saying, “Just to be sure . . .” or similar clarifiers can solve a lot of problems.

**Topic: Callers in public places**

**Question:** Do you have any suggestions regarding the very personal and graphic questions about vomiting and stools? There is some discomfort amongst our dispatchers about that kind of questioning being yelled from person to person in a public place. Believe it or not, we still get many calls from corded phones, especially from restaurants, bars, and other places of business.

**Academy Answer:** The Academy suggests that the protocol be adhered to as is. While we understand your EMDs’ concerns about public propriety, we have not received any feedback in this regard from probably a thousand or more centers actually using the ASA Dx tool since its beta release. If someone is possibly having a heart attack, political correctness should not be an issue.

**Topic: Speaking to the patient**

**Question:** We know that it is counter-protocol to ask to speak to the patient under normal circumstances, but can an exception to that be considered for the ASA Dx tool, if the phone can be brought to the patient or if someone can call back from a cell phone the patient can use?

**Academy Answer:** The Academy has discouraged this practice in general because it was often used in an attempt to *disprove* what the caller was saying. In this case, it would not be bad, but if the phone is corded, then the distance issue is still present. Having someone call back on a cell phone is an interesting idea, but that may mean another calltaker is now in the mix. The Academy does not recommend wasting the effort to do either of these things.

**Topic: Potential PDI advice inconsistency**

**Question:** After we tell the patient/caller, “I’m going to tell you exactly what to do next,” we say, “Are you allergic to aspirin?” It seems like we are not telling them what to do. What about adding something such as, “I am now going to recommend some medication for you/him/her if indicated”?

**Academy Answer:** The Academy maintains that the current protocol is correct. The EMD is determining exactly what to do next via the ASA Dx tool questioning. The Academy does not anticipate this to be a problem, and adding an unneeded explanation will just take more time.

**Topic: Age cutoff of 16 versus 35 (the lower limit of the cardiac age range)**

**Question:** ASA is typically used as a treatment for a potential cardiac event. Why is ASA offered to patients as young as 16, when the Chest Pain Protocol views patients younger than 35 as an ALPHA response level? It seems like there is some contradiction. Thank you for your help!

**Academy Answer:** The 35-and-over age range is a statistical probability for cardiac events and is related to response. The 16-year-old cutoff for aspirin administration has to do with the risk factor of Reye’s syndrome in children. Because aspirin administration is so benign in patients 16 and over, it is advised in the new protocol, even though a cardiac event is unlikely (but not unheard of) in patients under age 35.

As a side note, patients under cardiac age range with chest pain are more likely to be having a cardiac event when the chest pain is accompanied by other symptoms like sweating, change of color, or shortness of breath; thus the higher response recommendations in the MPDS when such symptoms are present.

**Topic: Alertness issue**

**Question:** It would seem that the ASA Dx tool is only to be used if the patient is alert, yet that is not on the protocol card anywhere. Shouldn’t it be? I know it is mentioned on the “Special Update” circular that came with the cards.

**Academy Answer:** The alertness requirement on the manual pull-out card is listed as a pre-question qualifier in the first question: “(Chest pain and alert  $\geq$  16).” In the ProQA software version, it is in the blue CEI header: “Select one for alert patient  $\geq$  16: 1st party or 2nd party caller.” The Critical EMD Information under the PDIs also includes the “alert” requirement.

**Topic: Caller doesn't know the answers**

**Question:** What do you do if you cannot get a straight yes or no answer to the questions? What is considered the best course? Proceed or stop? There is no guidance for “I don't know.” We get that answer all the time with grown children calling for elderly parents who can't tell us if Mom or Dad has a heart condition or not. Which side do we risk erring on?

**Academy Answer:** An unknown answer is to be considered okay to proceed. Since the only time ASA could be administered is if the caller and the patient are in the same vicinity, they most always know or can ask the patient. We at the Academy have not heard that this is actually a problem so far. Statistically, an unknown answer would be highly likely a “good to proceed” situation.

**Topic: Unknown allergy status**

**Question:** If a second party caller doesn't know the patient's allergy status, and asking the patient is not reliable, I assume we don't give the aspirin.

**Academy Answer:** The chances of allergy in a given patient, if unknown, is very low (how low, we don't know exactly). It may be worth considering whether to modify the ASA Dx tool to account for unknowns. While very unlikely, it is certainly a possibility.

**Topic: Assuming “not allergic” if the patient is already taking aspirin**

**Question:** Now that we are into the dispatch ASA era, can we mark “not allergic” as obvious if we learn that the patient is truly on daily aspirin?

**Academy Answer:** Do not assume anything without actually asking the question. It's a double-check, and it provides some obvious medical/legal coverage.

**Topic: Order of the aspirin-qualifying questions**

**Question:** Our dispatchers have noticed that a good number of patients don't have aspirin. They're wanting to know if question 4, “Does anyone there have any aspirin or Bufferin available?” could be asked first. Their thinking is that this would save some time.

**Academy Answer:** Regarding the order of the questions, the Council of Standards has considered this recommendation before and elected to leave it as is, based on the fact that this may require the caller to go and search for aspirin at this point, where the other questions can be routinely answered on the spot. It would be

nice to know the percentage and number of cases out of a hundred where the patient was qualified to take aspirin, but none could be located. It would be very helpful if your center could keep track and report back.

**Topic: First-party callers locating aspirin in their home**

**Question:** We are concerned with first-party callers having chest pain who are then asked to find aspirin in their homes. Diagnostic question 5 tells the caller to get the ASA. In the case of a first-party caller, we would not want the patient to be walking around the house to get to the bottle of ASA. If it is close, either immediately in reach or on a table close by, then it's reasonable, but not if it means walking to the bathroom and hunting through the medicine chest.

**Academy Answer:** This concern was discussed during development, and the resulting compromise was that the patient should only do it within their home based on the perceived risk/benefit balance. Going to the third floor searching stretches things a lot. Certainly the points you make are equally valid. There is no clear line to draw on this one. The Standards Council intends to re-address this question based on user feedback and new expert recommendations.

**Topic: Sending someone to the neighbors to retrieve aspirin**

**Question:** Rule 3 (sending someone to the neighbors for ASA) strikes us as one step too much. The advice to not leave the patient unattended is solid, but even so, in the event that someone in the house has chest pain, I think it will incur more anxiety and confusion at the scene if we're trying to send someone to hunt up ASA at the neighbors.

Given that these are mostly DELTA or ECHO calls, the paramedics will likely arrive at the same time as the ASA if not before. In our system, almost all paramedics (except in very rural/remote locations) carry ASA. With response rates for DELTA and ECHO calls under 15 minutes in our metro areas, we are hard pressed to push this very hard there. I understand that the guidelines suggest earliest ASA is best, but has the literature shown that 15–20 minutes makes a difference? We all believe that EMS should give ASA because (1) earlier is better in general and (2) hospitals are poor at remembering to give it.

We like the idea of coaching for ASA in rural locations where response times can be prolonged and some of the paramedics are not licensed to give ASA. In those cases,



it may make good sense to send someone to the neighbor for ASA (although in a rural setting, the “neighbor” may be miles away). I’m very interested to hear what suggestions you can make.

**Academy Answer:** This was significantly debated during development. The fact is that some areas have long response times. Average times are just that—averages. For every one under the average, there is one over, and some way over. Traffic, time of day, delays in the queue, and other delaying events cannot be predicted. Given the fact that the ASA Dx tool may end up being used in up to 2,000 EMD centers in 23 countries in the world, the final determination was that the act of commission was better than that of omission. It has been stated that even in the best EMS systems that allow aspirin to be administered by the arriving responders, 10–30 percent of qualified patients don’t receive it. The overall potential for impact of this advice could result in thousands of patients getting aspirin earlier or even getting it at all.

Regarding the scene, people love being “deputized” to do things they think are for the patient’s good. The Academy does not expect that confusion and anxiety will be a big problem here.

Regarding support of the 15–20 minutes earlier argument in the literature, it would be difficult at best to design a study to take into account this time frame. Given the number of people this will affect through the unified protocol, the Academy is confident that sooner is better in some incremental way and that people will benefit by it—whether large numbers or small.

Brett Patterson, Chair of the Council of Research, adds:

*There is no actual instruction telling a second-party caller to go to the neighbor’s home to get ASA. This possibility was written as a Rule and states that second-party callers can be asked to have someone else check for ASA nearby. This “someone else” was purposeful so the caller does not leave the patient alone, and again, it is not an actual instruction. I think there is some leeway regarding when the EMD does this, i.e., response time.*

**Topic: Evidence for correct dose of aspirin at dispatch**

**Question:** What is the current evidence for the correct dose of aspirin in the dispatch setting?

**Academy Answer:** In the detailed and long-debated dispatch standard for dosing, the Council relied on a very specific reference from the 2005 ILCOR guidelines, ACS Care section, as follows:

*Dispatchers and EMS providers must be trained to recognize symptoms of ACS. Dispatchers should advise patients with no history of aspirin allergy or signs of active or recent gastrointestinal bleeding to chew an aspirin (160 to 325 mg) while awaiting the arrival of EMS providers (Class IIa).<sup>185</sup>*

Dr. Joe Ornato offered this advice on a similar question:

*ACC/AHA STEMI Guidelines (2005, the latest version, of which I’m a co-author) call for 162–325 mg of ASA chewed and swallowed. We know that the 81 mg secondary prevention (prophylaxis) dosage is too small for STEMI patients who have active thrombus formation because of relative ASA resistance. That’s why the 162–325 mg dosage was chosen. You’re OK to give ASA in any of the above forms/combinations as long as it comes out to 162–325 mg. We have no data conclusively showing whether 162 or 325 mg is better. That’s why we wrote it as a range.*

ASA is not commonly found in lower doses in adult patient residences. One adult aspirin, which is within the recommended dose, is commonly available and, therefore, practical. The Academy’s official expert physician sources at the AHA/ILCOR also indicated that even higher doses, such as 500 mg—which may occasionally be found—would not be problematic, as many older patients are also aspirin resistant, and therefore, higher doses for this sentinel event are not significantly harmful and much more likely beneficial.

**Topic: Patient who has recently taken aspirin**

**Question:** Are we to direct the patient to take an aspirin if they have already consumed any? Does it matter how long it had been? I spoke to a lady today who had chest pain and took two aspirins 3 hours prior. I didn’t administer per the card, not knowing if it would hurt. Could you advise?

**Academy Answer:** This question came up early with the Academy’s AHA physician contacts during development. They said, if otherwise qualified, to give one aspirin dose anyway and added that many people who routinely take aspirin have resistance to it already. That’s the Academy’s position and also why this situation isn’t in the qualifying questions.

**Topic: Aspirin resistance issue**

**Question:** Regarding Rule 5, what is the evidence that “aspirin resistance is quite common” and the direction to give an additional dose if the patient has just taken aspirin? I believe that the current cardiol-

ogy literature speaks of some morbidity associated with larger doses of aspirin in the setting of ACS. Please explain the reasoning here.

**Academy Answer:** The Academy was in contact with AHA-member physicians that participated in the development of the AHA recommendation to administer aspirin at dispatch. Dr. Joe Ornato forwarded the following rationale:

*Whether having recently taken aspirin in the last 4 hours vs. the last 12 hours would negate the need of further administration? ISIS-2 (surprisingly at the time) showed that ASA administration vs. placebo was still beneficial even in patients who reported that they had taken ASA earlier that day. Many of these patients were on daily ASA, and it is believed that when a STEMI occurs in such a patient on a daily (or frequently recurring) dosage, they are likely aspirin-resistant to that dosage. That is believed to be the explanation for the measurable benefit of giving an extra dose of ASA. That said, it is not clear (because no one has reported studying this issue) whether there is benefit from EMS providers giving ASA to a patient who is not on it regularly but has self-medicated with ASA prior to EMS arrival. In my opinion, to keep things simple, if there are no contraindications to ASA, it would be better to have EMS give the dose (even if it's an "extra" dose) to patients who report having taken ASA that day, based on ISIS-2.*

**Topic: Aspirin medications containing more than 325 mg**

**Question:** The ASA Dx tool recommends a much larger dose of ASA than is employed in our local protocols and ACLS guidelines. We would recommend a dose of 160 mg chewed, not 325 mg as stated on your protocol. What is the reason for the double dose of aspirin?

**Academy Answer:** In the detailed and long-debated dispatch standard, the Council of Standards relied on a very specific reference from the 2005 ILCOR guidelines, ACS Care section, as follows:

*Dispatchers and EMS providers must be trained to recognize symptoms of ACS. Dispatchers should advise patients with no history of aspirin allergy or signs of active or recent gastrointestinal bleeding to chew an aspirin (160 to 325 mg) while awaiting the arrival of EMS providers (Class IIa).<sup>185</sup>*

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**Topic: Low dose versus baby aspirin**

**Question:** Some callers, when asked if they have aspirin, say they have the "low dose" adult aspirin. Should we be asking how many milligrams? And if so, do we have them take 4?

**Academy Answer:** The protocol was modified during the beta testing of v12.0 to add wording regarding "low dose" to the baby aspirin text. As far as we know, the dosage of "baby" and "low dose" is the same, therefore 4 low-dose pills is correct. Good recommendation.

**Topic: Coated versus regular aspirin**

**Question:** Is there any risk, or decreased benefit, of chewing a coated aspirin (e.g., Ecotrin) as compared to a non-coated aspirin?

**Academy Answer:** The Academy has asked two pharmacists in person and e-mailed a question to Rite Aid's "Ask a Pharmacist" program. Both local pharmacists said there were no problems chewing a coated aspirin and the effect should be the same. Here is the Rite Aid response:

*Thank you for using Rite Aid Clinical Services. In reviewing our drug information resources, we have found chewing aspirin hastens its anti-platelet effects. Chewing an aspirin is a very important emergency measure for the prevention of a suspected heart attack or stroke to prevent damage due to blood clotting. Although uncoated aspirin is preferred in this emergency situation, we found no information to suggest that chewing a coated aspirin was any less beneficial.*

**Topic: Inclusion of Bufferin™ brand in the questions**

**Question:** Why do you refer to Bufferin (proprietary name), and not just aspirin, in the diagnostic questions?

**Academy Answer:** The Council of Standards determined that Bufferin is the most common brand name encountered in America and, in an attempt to expand the immediate understanding of the request, included it in the question to the caller for the North American version.

**Topic: Aspirin medications containing caffeine**

**Question:** I am concerned with the section “Aspirin Containing Medications” since a number of the compounds listed have caffeine in them. I do not believe that giving caffeine to a patient with acute coronary syndrome (ACS) is prudent.

**Academy Answer:** It was determined by the research and expertise of the Council of Standards that, in the absence of simple ASA products, combined compounds in the list included would do no significant harm to these patients. In addition, the risk/benefit was considered much

to the advantage of those receiving an ASA-containing medication than not. It was also commented on multiple times that a single pill of any of these brands would not be detrimental to the vast majority of patients.

**Topic: Aspirin medications also containing acetaminophen/paracetamol**

**Question:** In the list of Aspirin-Containing Medications, it lists Excedrin and says “(only if aspirin based; another variety contains acetaminophen)”. From what I can tell from the Excedrin website, all varieties of Excedrin contain acetaminophen; only some contain as-

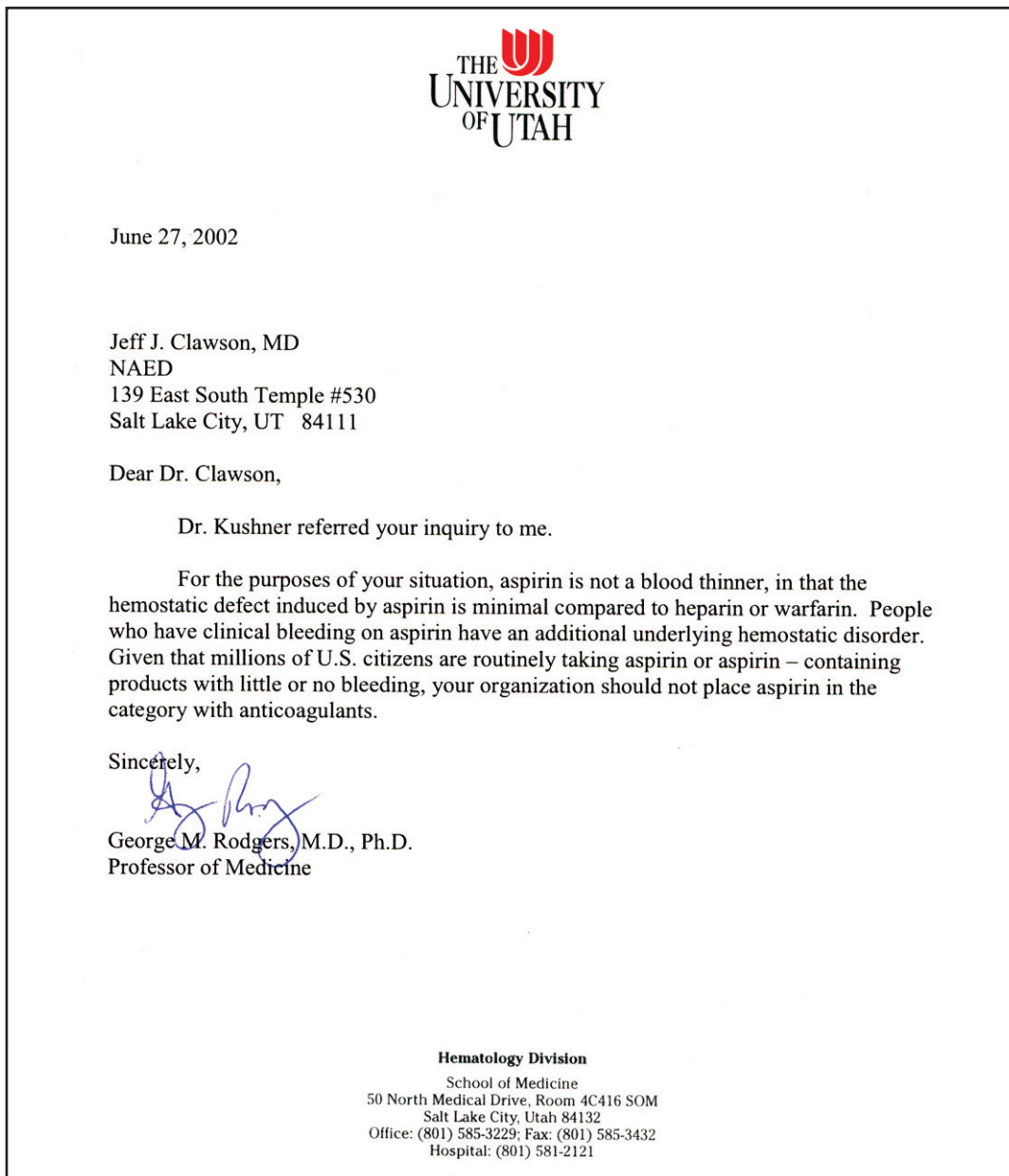


Fig. 6-8. Letter from George M. Rodgers, M.D., Ph.D., regarding aspirin versus warfarin.

pirin. Clearly, EMDs would not recommend Excedrin products that contain *no* aspirin as there would be no cardiac benefit. My question: Is it OK for EMDs to recommend Excedrin products that contain both aspirin and acetaminophen? The parenthetical note is a bit confusing on this point. Is the purpose of the parenthetical to point out that only Excedrin products that contain aspirin should be used, or is there something dangerous about taking acetaminophen?

**Academy Answer:** It is okay to take the Excedrin containing both aspirin and acetaminophen. While acetaminophen (Tylenol®) can be dangerous to the liver in large doses, one of any aspirin-containing medicine (unless it's the CIA's black cyanide death pill) won't really hurt anybody. That's why this stuff is sold over the counter.

**Topic: Patient is already on warfarin (Coumadin®)**

**Question:** What if the patient is taking warfarin? I assume it's the same advice as if they have taken aspirin, i.e., still tell them to take the dosage in the ASA Dx tool. I would also assume if they are on warfarin they shouldn't be having an MI?

**Academy Answer:** The blood thinners issue was fully addressed by the Council of Standards and was, in conjunction with our experts at ILCOR, determined not to be a disqualifier. In a nutshell, the effects of warfarin and aspirin are very different. Aspirin is actually not considered a blood thinner but a platelet greaser. A clarifying letter from one of the top Hematology Departments in the world adds some flavor to this (see fig. 6-8).

**Topic: Chew and swallow versus just swallowing**

**Question:** What is the current evidence for chew and swallow vs. just swallowing aspirin?

**Academy Answer:** The ACC/AHA STEMI Guidelines for 2005 call for 162 to 325 mg of ASA to be chewed and swallowed. It is believed that this speeds up the absorption both under the tongue and in the stomach.

**Topic: Washing down the chewed aspirin with water**

**Question:** What is the evidence that prehospital aspirin, if not chewed/swallowed, should be taken with "just a mouthful of water"? Is there any evidence that a normal amount of water to wash down a pill is associated with morbidity? My concern is the GI irritant effect of aspirin without water.

**Academy Answer:** The advice in this option is not general advice for each case, but is only to be given when the caller directly asks, after the patient has chewed the aspirin-containing medication, if they could "wash the bitter tasting aspirin down." This resulted in the secondary approved advice to "Tell her/him that s/he can use just a mouthful of water to wash it down." This advice was also vetted through Dr. Ornato as AHA Aspirin Committee member and EMS/cardiology expert. As you can imagine, the usual pre-arrival fears of subsequent vomiting and aspiration were considered in the conservative ultimate wording of this advice.

**Topic: Responder notification that qualified patient did not take aspirin**

**Question:** I have been playing with the ASA Dx tool. When I do give ASA, everything works, including the verification pop-up message. However, *no* notices are given when a patient *did not take* the aspirin. I think that an ASA-qualified person who ultimately does not take any aspirin is a pertinent negative that should also be documented by an "urgent message" to CAD.

**Academy Answer:** This is an excellent observation. We have now added an "aspirin taken" or "aspirin not taken" verification into the Key Question answer sequences and the Comment Log for notification of the responders.