The History of Aspirin: An Old Remedy Reexamined

by Karen Brinkman

- Thousands of years ago, a wise man lived in Greece. His name was Hippocrates, and he was widely considered a knowledgeable man of medicine. One day, as he sat under a large shade tree to teach and write, a man approached him, seeking medical advice for a member of his family. The man described the symptoms that his family member experienced: fever, aches, and pain. Hippocrates gave the man some medicine: a powder made from the bark and leaves of a willow tree.
- Living in the 21st century, this medicine might sound strange to us. Bark and leaves? What possible good could those do anyone? In many ways, it's true that medicine has changed a great deal since the time of Hippocrates. But in other ways, it hasn't changed at all. After all, the medicine that Hippocrates prescribed for his patient is something with which you are likely familiar: aspirin.
- During the time of Hippocrates and even before, people knew that chewing the leaves of the willow tree relieved pain. Evidence shows that Native Americans living in North America, as well as people on the continent of Africa, knew of the willow's medicinal benefits. In the 1820s, scientists in Europe tried to determine what exactly was in willow leaves that relieved pain. They discovered a chemical that they called salicin. They combined it with an acid to create a powder that they called aspirin.
- When aspirin was first created, people thought of it as a panacea. However, people soon found that aspirin did not cure everything. For example, some thought it might help eliminate unwanted freckles. Others thought it would cure measles. Still others thought it might cure rabies. It did none of these things, but it did effectively relieve pain.
- 5 At first, people were thrilled. If they had an ache, pain, or fever, they could go to the doctor and receive relief in the form of a prescription for aspirin. However, most people soon discovered that the acid in aspirin caused an upset stomach. In 1897, a German chemist named Felix Hoffman remedied this problem. He changed the formula slightly so that aspirin would combat pain yet be gentle on the stomach.
- While not a universal cure-all, aspirin has been found to have other health benefits. In the 1940s, a doctor in California discovered something amazing about aspirin. As he looked over his patients' charts, he realized that none of the patients who took aspirin regularly for pain had ever had a heart attack. Other patients in his practice, who did not regularly take aspirin, had had heart attacks. He wondered if it was just a coincidence or if aspirin somehow helped his patients to avoid heart attacks. Medical studies over the years have concluded that aspirin does help prevent certain types of heart disease. Aspirin has been found to break up dangerous blood clots and to thin blood in the body. Many patients are now prescribed a low-dose aspirin as a daily supplement to prevent heart attacks.

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- 7 In 1996, the Massachusetts Institute of Technology (MIT) conducted a survey. They asked people "What invention couldn't you live without?" When given a list of choices, "aspirin" ranked high. That just goes to show that old technology is not necessarily minor and that its value can be enduring.
 - 7 How does the author introduce the key idea that aspirin is a natural remedy?
 - A She explains how aspirin has changed over the years.
 - **B** She lists the problems people thought aspirin would help cure.
 - **C** She tells a story about a wise man giving someone some medicine.
 - **D** She lists the things that a man's family member suffered from.
 - **8** Which paragraph provides the **strongest** support for the idea that medicine bears some similarity to what it was in Hippocrates' time?
 - A paragraph 1
 - **B** paragraph 3
 - C paragraph 5
 - **D** paragraph 6
 - **9** Which phrase from paragraph 4 **best** helps the reader understand the meaning of the word "panacea"?
 - A "first created"
 - **B** "people thought"
 - **C** "cure everything"
 - **D** "cure measles"

10 Read this sentence from paragraph 6 of the passage.

While not a universal cure-all, aspirin has been found to have other health benefits.

What idea does this sentence introduce in the passage?

- **A** Powdered medicines cause upset stomach.
- **B** Doctors need to find a cure for measles.
- **C** Aspirin provides relatively little pain relief.
- **D** Aspirin provides more than just pain relief.
- 11 Which of the following claims is **best** supported by the passage?
 - **A** If Hippocrates were alive today, there would be no disease.
 - **B** Natural medicines are better than modern ones.
 - **C** Asprin has been used for a long time because it is so effective.
 - **D** People initially get excited about any new medicine.
- **12** Read this dictionary entry.

minor (n) 1. a person who is too young to be given all rights (adj)

- 2. small in size or importance 3. being too young to be given all rights
- **4.** being a musical scale in which the third tone is a half-step lower

Now read the following sentence from the passage.

That just goes to show that old technology is not necessarily minor and that its value can be enduring.

What is the meaning of "minor" as it is used in the above sentence?

- A definition 1
- **B** definition 2
- C definition 3
- **D** definition 4

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Which is the best summary of the passage?

- A Willow leaves had long been known to relieve pain. In the 1820s, the key agent was discovered, mixed with an acid, and called aspirin. Aspirin is still a popular pain reliever, with additional health benefits as well.
- Aspirin comes from the bark and leaves of the willow tree. People have used it for thousands of years, since the time of Hippocrates. It can't cure measles or rabies, but it is good for pain and to help people survive.
- C The most valuable medicine today comes from willow leaves and is called aspirin. It is the best pain reliever available. It used to upset people's stomachs, but a simple change in formula solved that problem.
- People, including Hippocrates, used to use willow leaves to relieve pain. Modern people didn't like chewing leaves, so scientists found the secret of willow and invented aspirin. At first, people were glad to have the new pain reliever.