

# Frequency of Leukemia during Late Decades May Indicate that the Anti-Helicobacter Pylori Antibiotic Strategy was a Therapeutic Mistake

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**Abstract** The study aimed to demonstrate the relation of *Helicobacter pylori* as a recent pathologic reason with the apparent increasing incidence of leukemia in developing countries during last three decades. Leukemia is considered as a family of diseases not a single disease. The cause for most types of leukemia is unknown; different types of leukemia are likely to have different causes. It is the most common type of cancer in children; however, about 90% of all leukemias are diagnosed in adults. Prognosis and success of treatment depend on type of leukemia and age of the patient; outcomes of treatment have improved in the developed world while the five-years survival rate is variable in different countries. *H. pylori* could migrate or get forced to migrate to the colon under the influence of antibiotics where it will continue producing ammonia for a reason or no reason, unopposed or buffered by any acidity leading to accumulation of profuse toxic amounts of ammonia in the colon with consequent initiation of a biological toxic stress to the body. This toxic stress condition could be expressed by the bone marrow as a toxic invasion to the body exciting the bone marrow to produce excess defensive white cells and hence, the development of a potential picture of leukemia. The study included seven patients with different types of leukemia at different stages of the disease. They were males with age range between 23-33 years except one female aged 70 years. They were mostly under care of skilled qualified healthcare centers. They were investigated for existence of colonic *H. pylori* strains by a specific test, and colon clear by the natural senna purge was done for four patients with positive test for natural eradications of *H. pylori* from the colon. Patients were advised to follow up strictly the strategy of their treating oncologists. Three patients improved dramatically after colon clear while three patients improved fast after single dose of therapy due to their movement to the healthier hospital atmosphere and intake of healthy meals avoiding their bad habits of misbehavior in outside-home fast food. The female patient was miserable in spite of her apparent good response after colon clear, she died because of long negligence of her bad general condition. Colonic *H. pylori* strains could be responsible for a considerable figure of leukemia spread in developing countries during last three decades. Newly discovered leukemia with frank *H. pylori* dyspepsia can be given a chance of spontaneous cure via natural colon clear and careful observation.

**Keywords** Ammonia, Colon clear, Helicobacter pylori, Leukemia, Senna

## 1. Introduction

While cancer has been long recognized as a disease of the genome, the importance of epigenetic mechanisms in neoplasms was acknowledged more recently. Leukemia was first described in 1827, a more detailed description was given by a pathologist in 1845. Around ten years after, it was concluded that a bone marrow problem was responsible for the abnormal blood of leukemia patients. [1-4]

By year 1900, leukemia was considered as a family of diseases not a single disease. The cause for most cases of

leukemia is unknown; different types of leukemia likely do have different causes. Both inherited and environmental (non-inherited) factors are believed to be involved [1, 2, 5, 6].

In 2012, leukemia developed in 352,000 people globally and caused 265,000 deaths. It is the most common type of cancer in children, with three quarters of leukemia cases in children being the acute lymphoblastic type. However, about 90% of all leukemias are diagnosed in adults, with acute myeloid leukemia and chronic lymphocytic leukemia being most common in adults. It occurs more commonly in the developed world. [1, 2, 7]

Prognosis and success of treatment depend on type of leukemia and age of the patient; outcomes of treatment have improved in the developed world while the five-years survival rate is variable in different countries. [2, 8, 9]

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Published online at <http://journal.sapub.org/ajmms>

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Near 1947, it was believed that a folic acid mimic could potentially cure leukemia in children. The majority of children with acute lymphoblastic leukemia showed signs of improvement in their bone marrow, but none of them was actually cured. In 1962, a combination chemotherapy was tested to attempt leukemia cure, the tests were successful with some patients surviving long after the tests; [10, 11]

*Helicobacter pylori* could migrate or get forced to migrate to the colon under the influence of antibiotic violence where it will continue producing ammonia for a reason or no reason, unopposed or buffered by any acidity leading to accumulation of profuse toxic amounts of ammonia in the colon; [12, 13] these excess amounts of ammonia could lead to adverse toxic effects in the body.

The motive of this study was a striking observation which attracted the attention of the research investigators of the study. In addition to the prevalence of the abnormal-behavior *H. pylori* stains and their direct relation to many medical challenges, it was observed that two cases of leukemia which were proved by blood count and bone marrow biopsy, have been cured spontaneously simply due to movement to a different environment for just three weeks; true leukemia is not known to improve fast as such even under medications.

## 2. Aim

Demonstration of *H. pylori* as a recent pathological reason behind the rising figures of leukemia in developing countries during last three decades.

## 3. Design & Settings

A Multiple-case clinical study which has been done in Jeddah/Saudi Arabia between May 2014 and October 2015.

## 4. Patients & Methods

The study included seven patients with frank long history of dyspepsia at different stages of different types of leukemia (two myeloid, four lymphoblastic and one lymphocytic). Those patients were actually seeking a second opinion consultation of an alternative therapy for their condition after the diagnosis and strategy of treatment was already established. They were males with age range between 23-33 years except one female patient aged 70 years. Two male patients were suffering acute myeloid leukemia with leucocytic count range of 42.000-44.000/Cmm at inclusion of the study. Four male patients were suffering lymphoblastic leukemia with total leucocytic count ranging between 45.000-88.000/Cmm on admission in a healthcare center or at inclusion of the study. The female patient was suffering a neglected case of lymphocytic leukemia with leucocytic count of 120.000/Cmm, her hemoglobin was 9 gm/dl and platelet count was 6.000/Cmm with many bleeding incidents. Patients were mostly under care of skilled qualified

healthcare centers. They were investigated for existence of colonic *H. pylori* strains by a specific test (*H. pylori* fecal antigen test). Colon clear using the natural senna leaves extract purge was advised for natural eradication of *H. pylori* from the colon for patients with positive fecal antigen test. [12, 13] Patients were advised to follow up strictly with their treating oncologists.

## 5. Results

All patients were found positive for existence of colonic *H. pylori* strains; it was strongly positive in four patients (three males and the female patient), colon clear was done for them. There was no chance or no need to employ colon clear for the other three male patients whose fecal antigen test was found weakly positive; spontaneous elimination of toxins from the colon has possibly occurred due to moving to the healthy hospital atmosphere with consequent avoidance of the bad habit of misbehavior in outside-home meals.

Two males with myeloid leukemia achieved normal leucocytic count without myeloid cells after colon clear; one has reached a leucocytic count of 3.800/Cmm in three weeks after colon clear while the other has reached 5.400/Cmm in two weeks after colon clear. One male patient with lymphoblastic leukemia (45.000/Cmm) has reached a normal leucocytic count of 6.700/Cmm without lymphoblasts in two weeks after colon clear. The total leucocytic count of the female patient dropped from 120.000/Cmm to 90.000/Cmm just in two days after colon clear before she died one day later because of deterioration of her general condition.

The leucocytic count of the other three males with lymphoblastic leukemia reached a normal level after two-three weeks of observation in hospital and intake of a single dose of combination therapy without employing colon clear possibly because of spontaneous clearance of the colonic toxins upon moving to the healthy hospital atmosphere and intake of healthy meals. In one of them, the leucocytic count dropped from 66.000/Cmm to 1.800/Cmm in three weeks following intake of a single dose of combination therapy taken near end of the third week of hospital stay, while the second patient with total leucocytic count 88.000/Cmm on admission has reached a leucocytic count of 7.200/Cmm just in two weeks with intake of a single dose of combination therapy shortly after admission. The third patient with leucocytic count of 76.000/Cmm on admission in hospital reached a count of 5.800/Cmm after three weeks of hospital stay and one dose of combination therapy taken few days after admission.

Patients were followed up for their colonic condition and recurrence of leukemia around 12-16 months. They were also advised to follow up strictly with their treating oncologists during the same period. Patients included in this study were not selected cases; they were just the seven consecutive patients during a particular period who have requested a second opinion of an alternative therapy for their illness.

Recurrence was not shown during the first six months after recovery as concerns the six male patients; serious carefulness towards their meals was of course expected. Recurrence occurred once or twice between the ninth and eleventh month for the six male patients possibly because of negligence towards their meals and their colonic condition. All recurrences were mild and improved smoothly within 1-2 weeks after colon clear.

The individual analysis of patients and their results might be useful as being illustrative and it is as follows:

First patient was a young male 23 years old with frank history of dyspepsia due to frequent outside-home meals. He was diagnosed as acute myeloid leukemia with leucocytic count of 55.000/Cmm, he was under combination therapy by a national guard healthcare center. His leucocytic count became 52.000/Cmm at end of first week of therapy, 49.000/Cmm at end of second week, 47.000/Cmm at the end of third week and 44.000/Cmm at the end of the fourth week. He was confirmed positive for colonic *H. pylori* strains and colon clear was done for him in the middle of the fifth week of therapy. Leucocytic count dropped from 44.000/Cmm to 21.000/Cmm in three days after colon clear, the leucocytic count further dropped to 7.000/Cmm with residual myeloid cells one week after, and the leucocytic count became just 3.800/Cmm without myeloid cells after further two weeks.

Second patient was a young male 25 years old, military soldier having most of his meals according to the kitchen routine of the military unit. He was diagnosed as lymphoblastic leukemia with leucocytic count 66.000/Cmm and he was in care of a national guard hospital. He was under careful observation in the hospital for three weeks after bone marrow confirmation of his diagnosis then he was given a first dose of combination therapy where his leucocytic count dropped suddenly to 1.800/Cmm. Medications were ceased, patient was isolated from reasons of cross infection, while repeat bone marrow examination revealed a normal picture. Colon clear was not needed for this patient.

Third patient was a young male 30 years old with frank history of dyspepsia due to frequent fast food meals, he was diagnosed by a specialized research and healthcare center as lymphoblastic leukemia with leucocytic count 88.000/Cmm.

He was staying in the hospital for observation as the leucocytic count was dropping after a single dose of combination therapy; his leucocytic count reached a normal figure (7.200/Cmm without lymphoblastic cells) in two weeks. Colon clear was not employed for this patient.

Fourth patient was a young male 28 years old with frank history of dyspepsia due to frequent outside-home meals, he was diagnosed as acute myeloid leukemia with leucocytic count of 49.000/Cmm and he was under combination therapy by a national guard hospital. His leucocytic count dropped to 42.000/Cmm after three weeks of therapy.

After colon clear which was done in the beginning of the fourth week, the leucocytic count became normal in two weeks (5.400/Cmm without myeloid cells).

Fifth patient was a young male 27 years old, military soldier having most of his meals in the military unit. He was diagnosed as lymphoblastic leukemia with total leucocytic count of 45.000/Cmm, he was under care of a military hospital and he was scheduled for observation and follow up for two weeks as an outpatient before admission for commencing therapy.

Colon Clear was employed for him with dramatic improvement of his blood count as repeat blood count on admission two weeks after colon clear revealed a normal picture (leucocytic count 6.700/Cmm without lymphoblastic cells), revision of bone marrow biopsy confirmed recovery of his condition.

Sixth patient was a young male 33 years old with frank history of dyspepsia due to frequent fast food meals, he was diagnosed by a specialized research and healthcare center as having lymphoblastic leukemia with leucocytic count 76.000/Cmm.

He has been kept in hospital under watchful waiting for three weeks after the first dose of therapy according to the policy of the healthcare center. It was noticed that his leucocytic count was dropping until it reached 5.800/Cmm without any further medications. Colon clear was not done for this patient.

Seventh patient was a female aged 70 years with a neglected condition of lymphocytic leukemia, at inclusion in the study her leucocytic count was 120.000/Cmm, hemoglobin was 9 gm/dl, platelet count was 6.000/Cmm with many bleeding incidents. She was under care of a private general hospital for enough time then she was discharged because of inability to afford the hospital bill and she was scheduled next day for admission in a university hospital for blood and platelet transfusion before starting chemotherapy.

She was receiving quite inadequate medications because of financial reasons. Colon clear was done for her immediately before admission in the university hospital, the blood count done two days later showed drop of total leucocytic count to 90.000/Cmm. Sadly, this poor patient died on the third day in hospital due to heart failure secondary to bleeding events and severe anemia.

## 6. Ethical Considerations

An informed signed consent was taken from all patients, they were made aware about safety of the natural colon clear; they were free to quit participation in the study whenever they like. Patients were advised to follow strictly their own medications according to the strategy of their healthcare providers. Patients were allowed to follow their own style of life if they are outpatients except restriction of outside-home meals or the routine of hospital ward if they are inpatients. The research proposal was approved and the study followed the rules of the Research Ethics Committee.

## 7. Discussion

There is no single known cause for the different types of leukemia; the few known causes which are not generally factors account for few cases. Leukemia, like any other cancer can result from mutations in the DNA. Certain mutations can trigger leukemia by activating oncogenes or deactivating tumour suppressor genes hence, disrupting the regulation of cell death, cell differentiation or division. These mutations may occur spontaneously or because of exposure to radiation or carcinogenic substances. Diet has got very limited or no effect, although eating more vegetables may confer a small protective benefit. [5, 14] Different risk factors could further include smoking, ionizing radiation, direct chemical exposure and prior chemotherapy. [1, 15, 16]

Clinical symptoms may include fever, easy fatigue, bruising problems and bleeding. Diagnosis is usually based on clinical symptoms, repeated blood counts and bone marrow biopsy, lymph node biopsy could be performed to diagnose certain types of leukemia in some situations. There are four main types of leukemia; acute lymphoblastic leukemia, acute myeloid leukemia, chronic lymphocytic leukemia and chronic myeloid leukemia in addition to a number of less common types. Three quarters of leukemia cases in children are being the acute lymphoblastic type while acute myeloid leukemia and chronic lymphocytic leukemia are being the most common in adults. Despite diagnostic methods many people may not be diagnosed as many symptoms could be vague, non-specific or misleading to other diseases. For this reason, one-fifth of the people with leukemia may remain undiagnosed for sometime as blood tests occasionally may not show that a person has leukemia specially in the early stages of the disease or during remission. [1, 2, 17]

Treatment of leukemia may involve combination of chemotherapy, radiation therapy and bone marrow transplant in addition to supportive and palliative care. Outcomes of treatment depend on whether leukemia is acute which is generally more severe versus chronic, the specific abnormal white cell type, stage of progression of the disease, the grade of tissue abnormality, the presence of metastasis, lymph node involvement, bone marrow infiltration and the skills of the healthcare team. The average five-year survival is 57% in the United States; in children under 15, the five-year survival is greater than 60-85% depending on the type of leukemia. Children with acute leukemia who are cancer-free after five years, cancer is unlikely to return. [1, 2, 8, 18-23]

Migration of *H. pylori* to the colon might cause accumulation of profuse toxic amounts of ammonia in the colon leading to a biological toxic stress to the body; [13, 24-26] this toxic influence could be either directly expressed by the bone marrow or translated by the defensive mechanisms as a toxic invasion to the body exciting the bone marrow to produce excess defensive white cells and hence, the developing picture of leukemia in such situation should not be considered an established chronic illness but could be

carefully watched and treated as a potential condition related to a temporary underlying pathologic reason. The exaggerated compensatory defensive behavior of the bone marrow could be therefore absolutely corrected by elimination of the underlying pathology as verified by the results of this study.

The fast improvement after colon clear compared to the slow response to the combination therapy was attributed in this study to elimination of the potential toxins from the colon. While the drop of the leucocytic count of the patients who did not employ the senna purge was explained in the study by the patients's movement to the healthy hospital environment and intake of healthy meals allowing spontaneous elimination of most of the colonic toxins below its pathologic level. This suggested spontaneous clearance of the colon from its toxins due to moving to a healthy atmosphere with healthy dieting might support a concept of colonic toxins-induced onset of leukemia among disadvantaged population. The miserable female patient, in spite of her deteriorated general condition, her circulation got rid of 30.000 bad white cells/Cmm without real therapy in just two days after colon clear; a matter that could support the concept of the influence of accumulated *H. pylori*-produced colonic toxins in inducing leukemia in susceptible predisposed individuals and the role of the natural senna purge in the management of the resulting potential leukemic condition through elimination of colonic toxins.

Leukemia as many diseases could be falsely misdiagnosed or undiagnosed and although observation and watchful waiting is one of the early lines of certain types of newly discovered leukemia therapy, [1] but an established leukemia with confirmed diagnosis after repeated blood count and bone marrow biopsy is not expected to vanish spontaneously in such a short period of time. In accordance, the leukemic patients encountered in this study were considered to suffer a potential condition induced by a temporary toxic influence; otherwise they would not improve simply after moving to a healthier environment or following elimination of the colonic toxins via natural colon clear.

## 8. Conclusions

Colonic *H. pylori* strains could be responsible for a considerable figure of leukemia spread among developing countries during last three decades which could be considered a compensatory response to the biological toxic influence related to *H. pylori*-produced ammonia in excess amounts in the colon. *H. pylori* antibiotic eradication therapies might require detailed revision and further accurate re-determination. Newly discovered leukemia patients with frank *H. pylori* dyspepsia could be given a chance of adequate close observation until spontaneous cure is achieved via colon clear employing natural measures. Those patients with colonic *H. pylori*-induced leukemia should be

considered susceptible predisposed disadvantaged individuals liable for recurrence; hence, they should watch their meals and colonic condition.

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