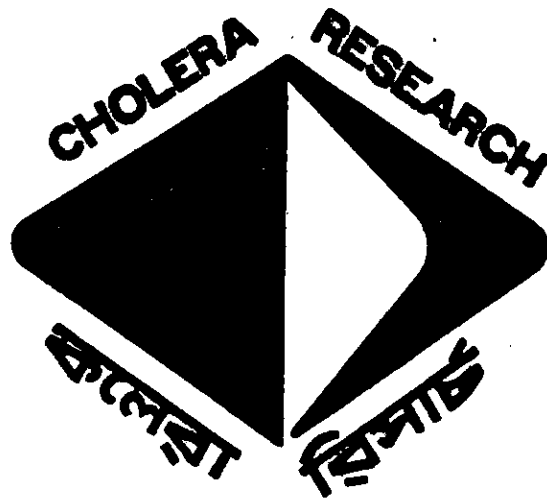


STANDING ORDERS FOR EVALUATION AND TREATMENT OF
PATIENTS WITH DIARRHEA SYMPTOMS WHO COME
TO THE TRAVELER'S CLINIC AT ICDDR.B



INTERNATIONAL CENTRE FOR
DIARRHOEAL DISEASE RESEARCH, BANGLADESH

Dacca, Bangladesh

September 1980

Special Publication No. 8

STANDING ORDERS FOR EVALUATION AND TREATMENT OF
PATIENTS WITH DIARRHEA SYMPTOMS WHO COME
TO THE TRAVELER'S CLINIC AT ICDDR,B

This booklet is intended to clarify the evaluation and treatment of patients with diarrhea symptoms who come to the travelers clinic. This should enable the nurse at the clinic to manage 90% or more of the patients. No booklet can cover all circumstances so that some judgement is still necessary. If in doubt a physician should be called.

Diarrhea symptoms can be categorized in several ways. This scheme divides the diarrheal illnesses into major types of disease.

1. Watery diarrhea vs dysentery
2. Acute vs subacute vs chronic
3. Diarrhea vs loose stools
4. Primary vs secondary diarrhea

In approaching a patient's symptoms, it should be possible to determine each of these 4 characteristics from the history.

Watery diarrhea vs dysentery

Watery diarrhea usually originates in the small intestine, is characterized by very runny or watery stools. Fever should never be greater than 101°F orally. Patients may have vomiting, malaise, ache-all-over-feeling, and some abdominal cramps. The cramps should not however be severe. The etiology of watery diarrhea is usually an infection of the small bowel with ETEC, Vibrio, rotavirus (in children less than 2) and occasionally Shigella.

Dysentery originates in the large intestine and is an inflammation of the colon - i.e. colitis. The disease is characterized by cramps, mucus and blood in the stool, usually fever, and tenismus (painful cramp in the rectum following defecation). Patients may have 20 or more B.M's per day but the volume of each is small. Dysentery is usually caused by Shigella and much less commonly by ameba. It may also be caused by campylobacter.

Acute vs subacute vs chronic

Acute diarrhea (symptoms > 3 days) is usually the result of an acute infection - such as ETEC or shigella.

Subacute diarrhea (4 to 28 days) may be the tail end of the acute diarrhea. Occasionally shigella has a gradual onset, very severe ameba may also present this way. Giardia typically has a gradual onset. Campylobacter also may be gradual. With subacute diarrhea the patient may have difficulty in pin pointing the exact date and time of onset; instead he just notices his bowels haven't been working properly lately.

Chronic diarrhea (>28 days) most common chronic diarrhea (not truly diarrhea) is giardia and tropical enteropathy. Less common is chronic amebiasis which should be associated with recurrent blood and/or mucus.

Diarrhea vs loose stools

Loose stools - Many patients have something noticeably wrong with their bowel movements but it really is not either watery diarrhea or dysentery. Typical of this is giardia which produces loose, foul smelling stools, with cramps, some nausea, occasionally heart burn. This is also typical of tropical enteropathy.

Primary vs Secondary diarrhea

Many infectious diseases, especially in children have diarrhea symptoms as part of their symptomatology. When this occurs, treatment is directed at the primary cause. An example is a child with otitis media who may also have diarrhea.

Use of the lab - Each patient with diarrhea or dysentery symptoms should have a stool ME. In addition, patients with acute or subacute diarrhea or dysentery should have a culture. A culture is not necessary for patients with chronic symptoms.

The stool microscopic exam gives much information.

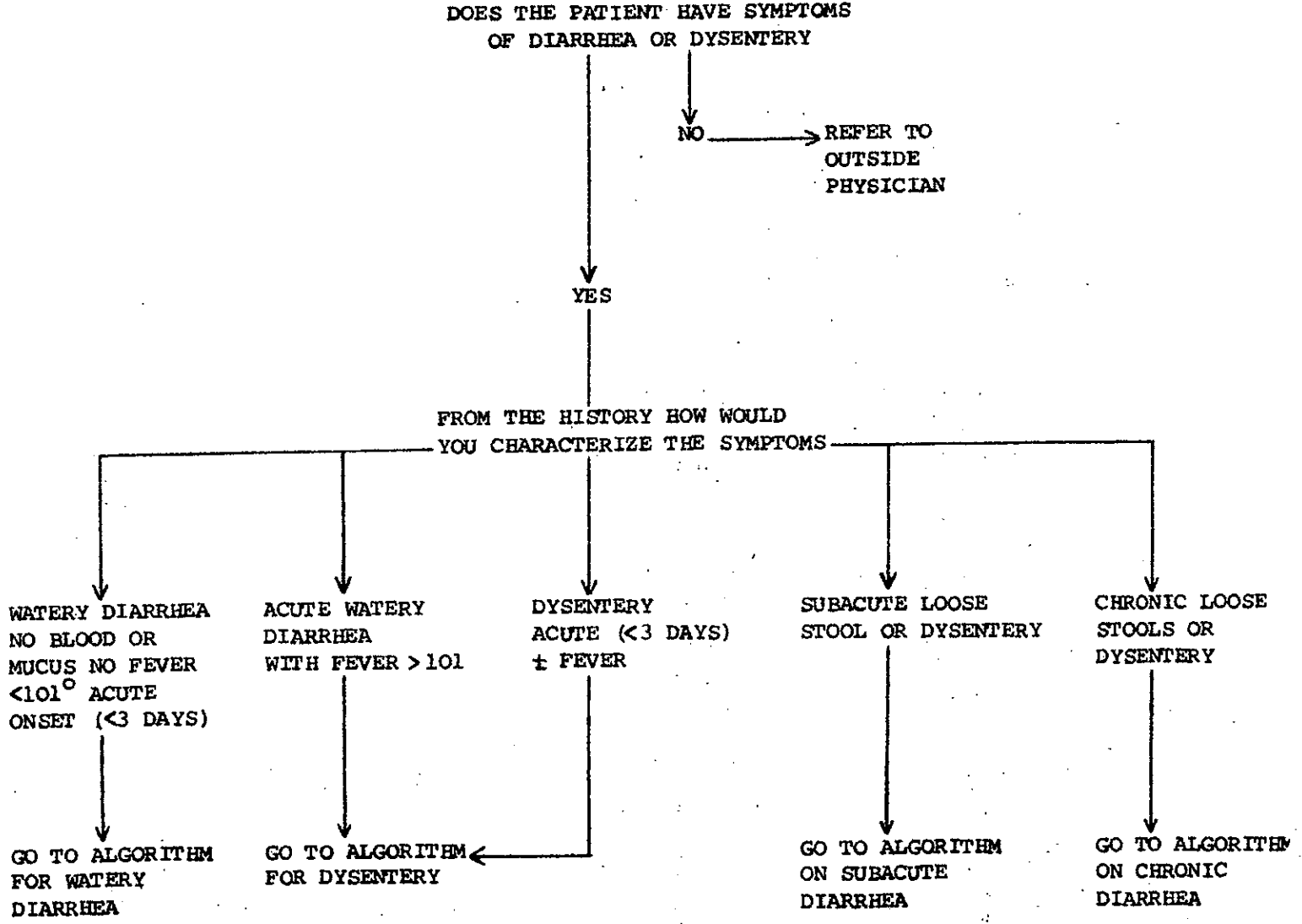
1. Is it dysentery? Dysentery stool will have >10 pus cells per high powered field.
2. Is it secretory or malabsorptive. Assuming the stool is not a dysentery stool, a secretory stool will be alkaline; a malabsorptive stool will be acid (usual pH <6.0). Secretory diarrhea = ETEC, V.chol, etc. malabsorptive = giardia, rotavirus,? other virus, tropical enteropathy, lactose intolerance, etc.

3. Are there specific parasites e.g. giardia, ameba?

Culture Was Shigella present? If so, is it sensitive to Ampicillin, Septra or Tetracycline. (These are the only antibiotics which would be used. The others on the report are for bacteriologic interest only).

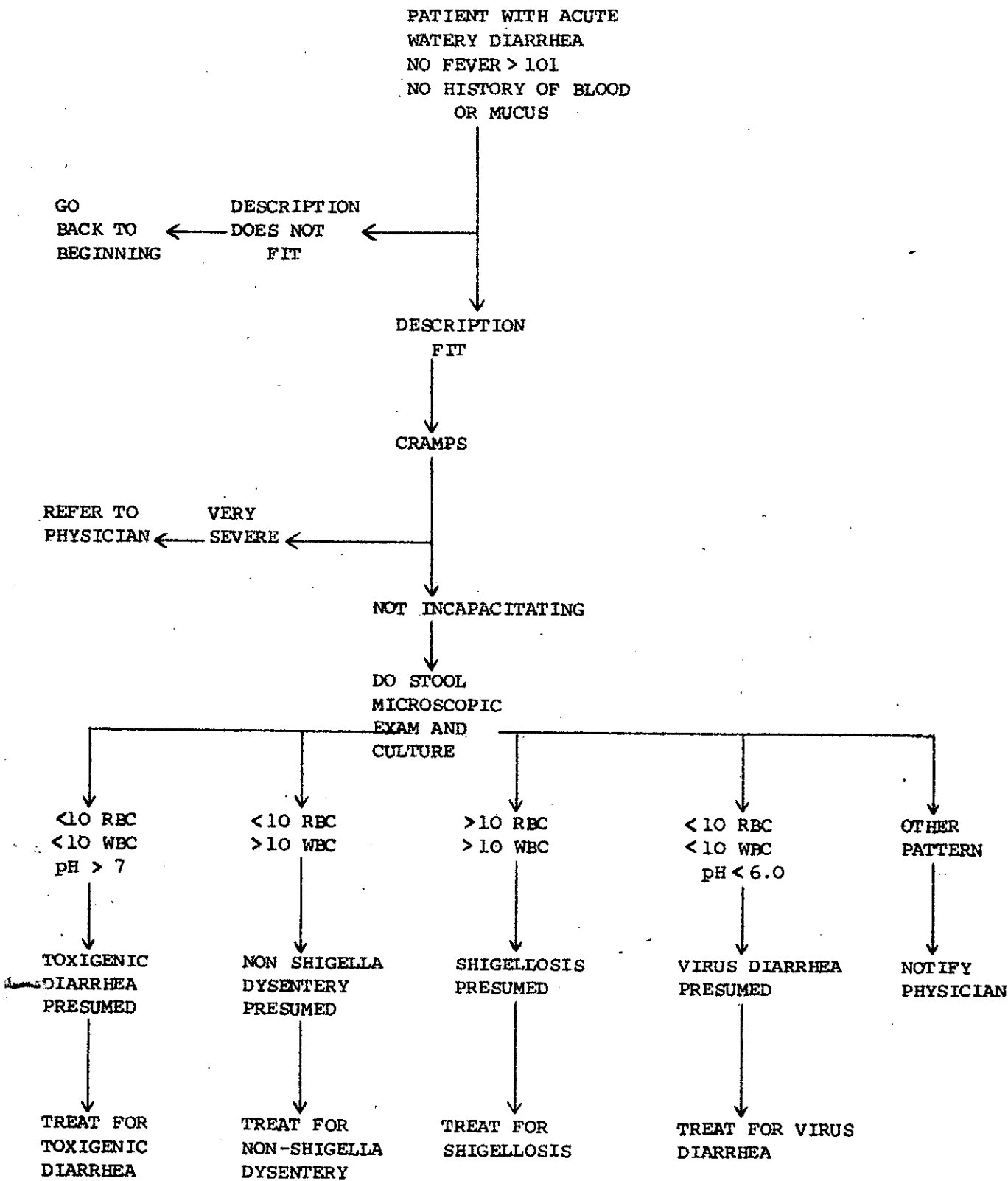
From this background we can draw up the following algorithms.

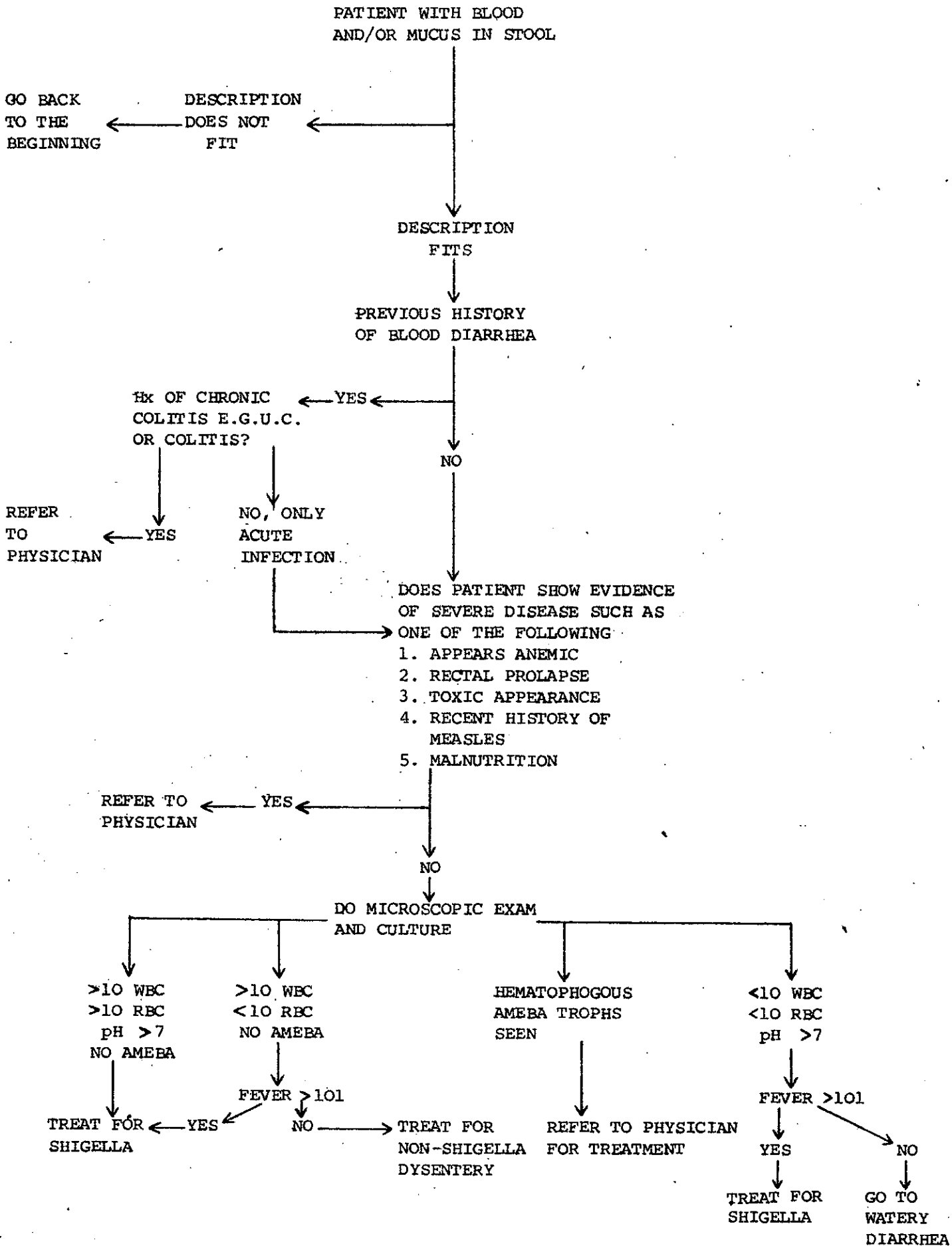
ALGORITHMS FOR THE MANAGEMENT OF DIARRHEA
IN THE TRAVELERS CLINIC-DACCA, BANGLADESH



: 4 :

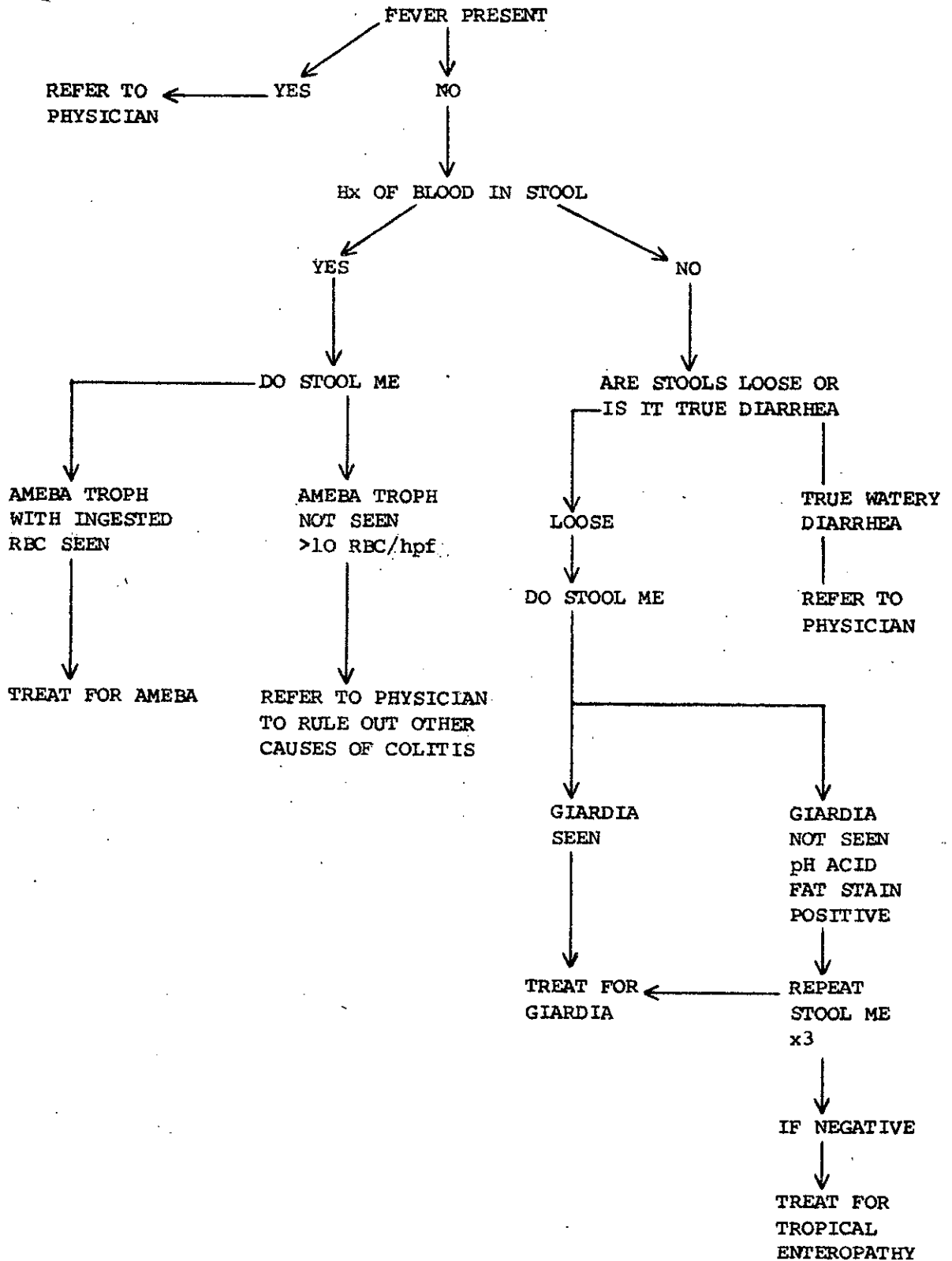
ALGORITHM - WATERY DIARRHEA





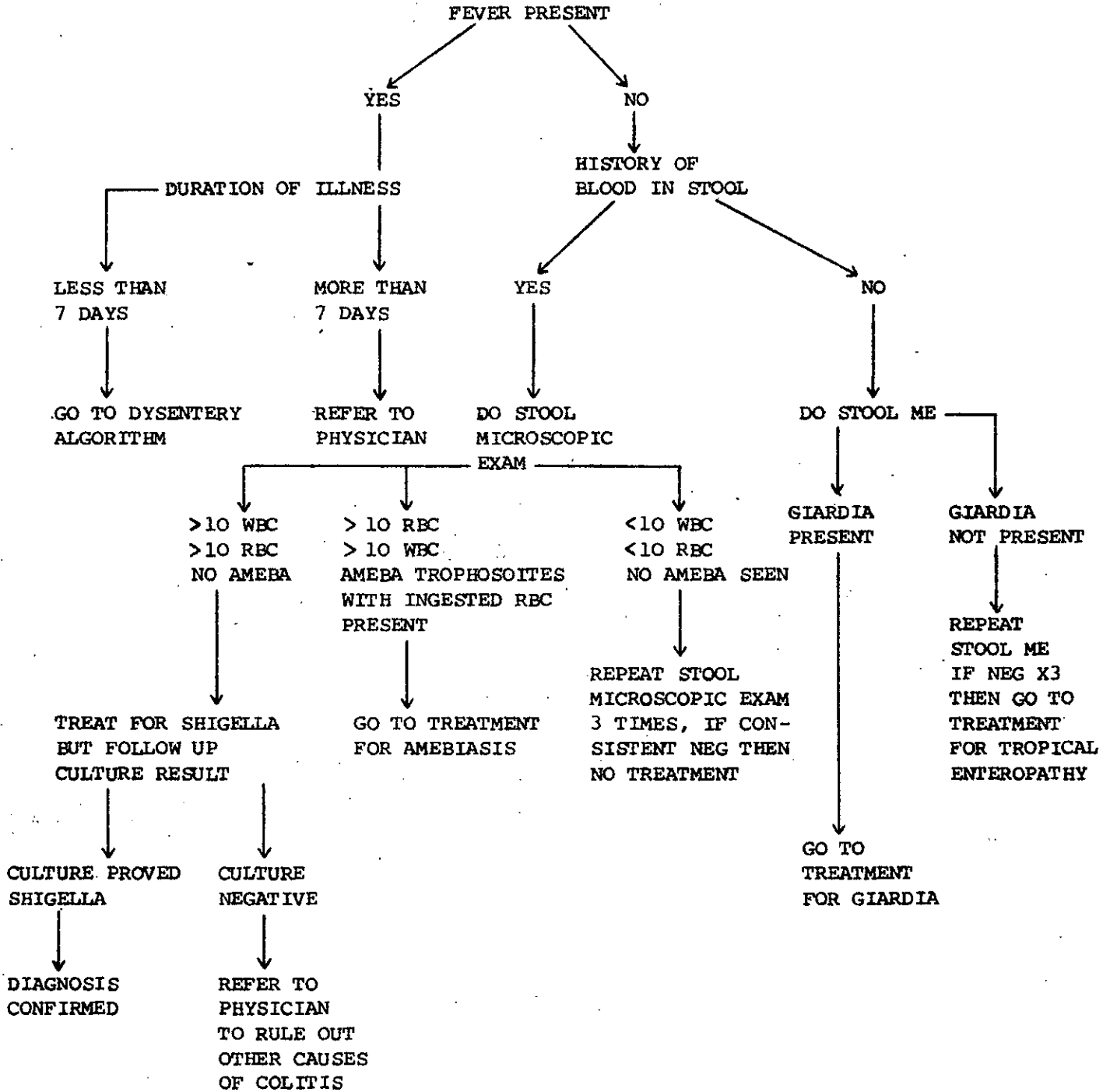
ALGORITHM FOR CHRONIC DIARRHEA OR DYSENTERY

THIS IMPLIES SYMPTOMS FOR MORE THAN 28 DAYS



ALGORITHM FOR SUBACUTE DIARRHEA AND DYSENTERY

PRESUMES SYMPTOMS HAVE BEEN PRESENT ≥ 3 DAYS



Treatments

1. Watery Diarrhea -

First assess degree of dehydration. If no demonstrable dehydration, give oral therapy packet and explain its use. If dehydration apparent, refer to physician for advise on treatment. Usually these patients will only need oral therapy.

2. Shigellosis -

Dehydration is usually not a problem but do rule it out. Antibiotics - Be sure to ask if patient has penicillin allergy.

A Ampicillin 500mg 4 times a day for 5 days for adults
20 mg/kg 4 times a day for 5 days for children.

B If allergic to penicillin or if shigella is resistant to Ampicillin.

Septrin 2 tablet twice daily x 5 days - adults
1 tablet twice daily x 5 days - age 5-10 year
½ tablet twice daily x 5 days - less than 5 years

3. "Non-Shigella Dysentery"

At present we don't know what this is. Protocol will be developed. If not in protocol - only provide oral therapy. If in doubt, ask physician.

4. Giardia

Flagyl 250 mg three times a day for 10 days
Warn about metallic taste, and avoidance of alcohol.
We will likely have protocol on short course therapy.

5. "Tropical enteropathy" - chronic undiagnosed "gut rot",

Doxycycline 100mg a day with food x 14 days

6. Amebiasis - treat only if organisms seen in stool ME.

a. Cyst passer or troph without RBC

Embequin 600mg TID x 20 days - advise they are carriers but do not have the disease.

: 10 :

b. Trophozoites with RBC -

these people do have the disease. The severity may range from mild chronic disease to severe life threatening. Treatment is with Flagyl 750mg TID x 10 days but patient should be seen by physician.

If in doubt re: a vs b - a proctoscopy can be done.