

Are Certain Dermatoses Bacterial Allergies?

EVIDENCE FROM TREATMENT

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SENSITIZED vaccines differ greatly from other antigens, both stock and autogenous. By treating the bacteria with specific immune rabbit serum it is claimed that specific antibodies become attached to the bacterial cells resulting in antigen-antibody combination. The bacteria are killed by chemicals and serum removed. It seems possible as a result of this process to give much larger doses of killed bacteria with fewer and less severe local and general reactions. One can begin with a dose of serobacterins which is equivalent to the final and highest dose usually recommended by those who manufacture and administer other vaccines. The makers limit the highest dose they recommend to about five times this initial dose. Most of the writer's good results are obtained only after these doses are exceeded. Occasionally twenty times the initial dose, which is 30,000 million organisms, (and *twenty times* the dose usually used with other vaccines) must be given to secure maximum benefit, in the more intractable cases of such reactions against bacteria as sinusitis, bronchitis, infective asthma, acne, furunculosis, chronic abscesses, arthritis, etc.

While thus treating such conditions the writer noted incidental clearing up of some chronic erythematous and papular rashes, so he began intentionally using sensitized vaccine therapy in certain skin conditions, with pleasing and sometimes striking results. These seem worthy of reporting, in the hope that others may assist in a more widespread investigation.

It can be demonstrated as a clinical fact that in many types of immunity reaction, or so called infections, and also in some sensitivity reactions, the body's "capacity to react" is favourably altered by adequate treatment with sensitized vaccines. Such obviously immunity reactions of the skin to bacteria as furuncles, impetigo, sycosis, are greatly improved and cured with such treatment. Are various other skin reactions, (not accompanied by pus formation) sometimes (or always) due to the presence of bacteria or their products? There is much in recent literature to suggest this.

After reading many recent articles by Stokes & Taylor,¹ Winston,² Pillsbury,³ Pillsbury & Nichols,⁴ Welsh,⁵ Sulzberger,⁶ Redell,⁷ Heinlein,⁸ Boe,⁹ Carpenter,¹⁰ Skiold,¹¹ Callaway,¹² MacKenna,¹³ Brain,¹⁴ Glaser,¹⁵ Hill,¹⁶ Torok,¹⁷ Norrlind,¹⁸ Epstein,¹⁹ and others the writer feels he is not alone, nor is he departing radically from the thought of numerous other workers, in suggesting that some so-called skin diseases *are* and others may be due to special or sensitivity reaction on the part of certain areas to the presence of bacteria, or of products of bacteria located elsewhere in the body.

The work of Storck²⁰ seems to be particularly convincing. He thoroughly studied over one hundred cases of eczema of various types by means of cultures, skin tests, control cases, etc., and concluded that "microbes can be of great importance in the origin and course of eczema"; the germs sometimes having an exclusive role and at others being only an important partial factor. He felt that the skin reactions were really allergic hypersensitivities to bacteria or their products.

The fact and type of clinical improvement not only of eczemas but of a number of other erythematous and papular skin conditions occurring with the administration of sensitized vaccines seem to corroborate this view. Although their action could be non-specific, various personal observations seem to indicate that there is at least some degree of specificity involved.

The Evidence

Some twenty consecutive cases of psoriasis, and eight of pustular psoriasis, which had lasted for various periods up to forty years, have seemed to receive such marked benefit from sensitized vaccine that the writer has prepared separate reports ^{21, 22} on these.

Someone has called seborrhoeic dermatitis "a cousin to psoriasis." Six cases of long duration were cleared up to the satisfaction of the patients, as were twenty-three cases of eczema-dermatitis, and twenty-seven cases of erythematous and papular dermatitis.

This means that in eighty-four cases of skin eruption of types usually considered difficult or intractable, sensitized vaccine has seemed to produce very favourable results. In most, but not all, some attempt at removing the results of the existing and often longstanding reaction was made by using an ointment, usually designed to relieve itching and thus overcome the mechanical irritation of rubbing and scratching. Even in cases of proven sensitization to foods or contactants this is often necessary in addition to avoidance of the allergen, in order to relieve the dermatitis originally started by the allergen! The ointment was not the same in all cases, and the author has not enough faith in his choice of ointments to believe they alone could produce the results obtained.

In the tables, the expression "practically cured" means that the entire local appearance and feeling had altered to an obviously healing state, which was giving so little trouble to the patient that he did not return, although told to do so if the process of healing did not continue to complete disappearance of the lesion. It is difficult to compare and analyze statistics; e.g., one patient from out-of-town can come in only occasionally. This makes his cure seem prolonged. Also, exposures to extraneous irritants vary greatly.

This small number of cases is probably not significant until certain special features of a number of them are drawn to the attention.

In seven there was no change in local treatment when the vaccine treatment was begun. In four of these improvement was almost dramatic, as it was in ten others where ointment was prescribed when the vaccine was begun.

The following observations seems worthy of note:

Focal infection is very frequently associated with skin diseases; e.g., sinusitis, infected cuts, boils, etc.

Focal reaction sometimes follows the vaccine, either at the site of the focus of infection, or at the site of skin reaction itself; sometimes a new and different skin eruption appears temporarily,—possibly the means whereby the body develops immunity processes!

In some cases improvement in a long standing skin condition is very sudden and marked.

There is frequently an early *removal of itching* in pruritic conditions, and patients often mention a different "feeling" in the skin after improvement following vaccine, as contrasted with an ordinary remission.

Patients often volunteer that they feel much better even when they had not previously complained of feeling badly.

In some cases there is a tendency within a few hours after sensitized vaccine to show a marked remission or improvement for a few days, only to show recurrence in less severe form. With no change in local treatment but further inoculations there is a slower clearing up of the eruption which seems to be more permanent.

Improvement beginning while one form of local treatment is being used usually continues when the local application is changed, so long as the course of vaccine is continued.

Most cases had had previous treatment, including soothing preparations, without much benefit.

Sensitized vaccine was used in a good many other cases along with such an assortment of local and general treatment that it is difficult to allocate the part played by it in the ultimate cure. In the eight months since the material for this article was organized a considerable number of additional cases have been treated with equal success. In many of them the only reasonable explanation of the observed clinical improvement is that it was caused by the sensitized vaccine given. Vaccine is not a substitute for good allergic investigation and/or omitting of sensitizers, removal of results of past reaction, etc., but may be added to these, often producing results which they alone cannot.

In all cases it is impossible to apply the method of controls in the standard manner, not only because other causal factors cannot be eliminated, as in laboratory experiments, but because once started the very presence of a dermatitis is in itself a source of continuing dermatitis and elimination of the original cause will not necessarily be followed by cure. For example, a nurse in a T. B. Hospital found penicillin or streptomycin would aggravate a dermatitis she had had on her fingers for over three years. Rash did not clear up with freedom from exposures. She had sinusitis, verified by x-ray. Sinusitis and rash cleared up under treatment²³ with sensitized respiratory vaccine plus soothing ointment, but rash can still be aroused by the contactants.

Statistics never prove anything but can be used to indicate probability. To the statistically minded it may be pointed out that the contrast between eight years (416 weeks) without treatment and without improvement and two weeks with treatment and with improvement is quite as valuable an observation as is the contrast between one patient without treatment and without benefit, and another with both.

NOTE:—The following rather dogmatic directions based on the author's experience will serve to guide the interested reader until he develops his own technique.

Product—Staphylo 'Sérobaeterin' Vaccine Mixed (No. 4822) Sharp & Dohme. In cases where sinusitis is suspected *H. influenzae* 'Serbaeterin' Vaccine Mixed (No. 4750) Sharp & Dohme, is also used (see bibliography—23).

Interval Between Doses—Three to seven days. Doses should not be repeated or increased at intervals of over a month.

Dosage—*Subcutaneously* (never intramuscularly).

0.2 c.c.; 0.4 c.c.; 0.8 c.c.; 1.2 c.c.; 1.8 c.c.; 2.5 c.c.

Repeat the last dose several times if necessary at intervals of one to four weeks. Infants and children tolerate these doses very well.

Local or General Reactions—are never serious, but in occasional cases may be sufficient to indicate repeating the causal dose, rather than giving a bigger one.

Conclusions;

From the eighty-four cases here mentioned, and many others where possible causal relationship was less easily observed, the author is convinced that in many skin diseases, (particularly the papular, erythematous and scaly types) sensitized vaccine in adequate dosage will so alter the reaction of body tissues and fluids to the presence of bacteria as to favourably influence the process of restoration of the skin to normal. Insofar as the disease represents a specific reaction to bacteria or their products, the response is sometimes sudden and dramatic and the treatment probably specific. Perhaps the expression "secondary infection" is often a misnomer and the bacteria are the primary cause. The writer has seen a few cases which seem to indicate that atopic dermatitis is merely bacterial allergy. If and where there are other causal factors the benefit may be due only to control of the bacterial element, though in some cases it is difficult to avoid the impression that there is a non-specific immunizing or hypo-sensitizing effect. The subject seems worthy of further investigation by other workers.

Case Reports:

F. L. Male. 27 years. Off work and treated under Workmen's Compensation for seven months. Originally left index finger had infected wound. Now entire finger dusky red, scaling with slight sero-sanguinous discharge and a discrete border near base. With daily dressings of ammoniated mercury ointment and inoculations of sensitized vaccine condition rapidly improved. Dressings discontinued in ten days, and patient discharged cured on seventeenth day, after five inoculations.

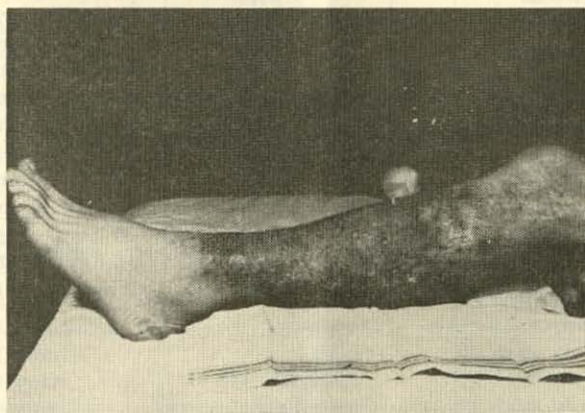
H. P. Male. 47 years. Erythematous eruption for eight years. Began around nose and upper lip. Now on arms, hands, legs and thighs. Some swelling and weeping,—sometimes scaly. Treated by general practitioners and one dermatologist without success. Soothing local treatment begun and one inoculation of sensitized vaccine. Rash improved greatly by second day—"the best in eight years." Treatment continued with general improvement, but some slight remissions, until in two months rash seemed well under control. Patient seemed to require monthly inoculations for almost a year to keep reasonably free of eruption. This appeared related to considerable chronic sinusitis, as rash tended to flare up when sinuses did so. Both conditions finally brought under control.

A. W. Scottish Farmer. 57 years. Eczema dermatitis face, hands, and arms for eight years. Thoroughly investigated in all standard ways by specialists in London, England, to no avail. Has chronic sinusitis. Given soothing ointment, ephedrine nasal drops, and sensitized vaccine. Following second dose arms and face were more inflamed and itchier, and developed scarletiform type rash (not itchy) on several areas of body where no rash had been before. In eleven days definite improvement noted. Skin

looks "thinner," is less itchy, and perspires with exercise for the first in a long time. Scarletiform areas desquamating. Patient returned home. Four weeks after treatment began one London doctor kindly reported the condition "has cleared up very dramatically." Treatment was continued in Scotland. Six months after treatment began the patient wrote: "I have been completely free from any sign of skin trouble, and could not be in better health than I am just now. Last summer was the best season I have had for eight years."

A. M. Male. 47 years. Itchy rash on chest recurring for some years. For seven or eight months has had red erythematous flush on face, for a few days at a time, becoming worse and more persistent. Had plenty of dandruff and erythema around hair line for years. Diagnosis seborrhoeic dermatitis. Given ung. hydrarg. ammoniatum and a course of sensitized vaccine. One week following second inoculation was much better. No rash present and feels "this is different than usual remission." Skin was practically normal in five weeks. Patient did not trouble to return for further treatment but two months later reported himself as practically cured.

W. F. Male. An infected abrasion with pus followed an injury to left shin sustained October 30, 1948. This healed, but left a dermatitis which occurred and re-occurred in spite of local applications. When seen February 7, 1949, there was a bright red, weeping dermatitis from below knee to ankle,



as illustrated,—and a blotchy erythematous eruption on arms, thighs and elsewhere. With soothing ointment and a course of sensitized vaccine improvement began promptly and proceeded steadily. Discharged from hospital in sixteen days and vaccine continued by his home doctor. When seen twenty days after that there was no inflammation of skin of leg and no rash anywhere else.

SEBORRHOEIC DERMATITIS

TABLE I

Sex	Duration	Improvement Noted In	Final Results In	
A.M.	M	Several years	10 days	38 days, cured
G.D.	F	5 months	4 days	42 days, practically cured
C.S.	F	Many years	34 days	76 days, practically cured
Z.H.	F	2 years	6 days	20 days, practically cured
H.C.*	M	2 years	9 days	54 days, practically cured
E.A.	F	6 months	20 days	52 days, cured

* (Recurrence about 3 months later, improved in one month.)

ERYTHEMATOUS AND PAPULAR CONDITIONS.

TABLE II

	Sex	Duration	Improvement Noted In	Final Results In
M.K.	F	9 months	11 days	37 days, practically cured
R.C.	M	3 weeks	4 days	25 days, cured
D.S.	M	1 month	16 days	40 days, cured
M.B.	F	2½ years	7 days	69 days, practically cured
R.B.	M	1 month	3 days	14 days, practically cured
A.M.	F	6 weeks	4 days	32 days, practically cured
L.M.	F	4 months	10 days	67 days, cured
J.S.	M	15 years	6 days	34 days, cured
B.S.	M	3½ months	3 days	24 days, cured
G.R.	F	9 months	3 days	50 days, cured
H.P.	M	8 years	2 days	Several months, practically
W.N.	M	3 weeks	9 days	31 days, practically cured
H.C.	F	5 months	3 days	12 days, practically cured
R.D.	M	4 months	3 days	30 days, practically cured
A.F.	F	Many months	2 days	41 days, practically cured
S.H.	F	6 weeks	4 days	28 days, practically cured
J.H.	F	3 years	2 weeks	6 months, practically cured
R.K.	M	2 months	3 days	40 days, practically cured
A.L.	M	Several months	4 days	8 days, practically cured
V.M.	F	4 months	3 days	27 days, practically cured
E.W.	F	6 months	2 days	3 months, practically cured
A.B.	F	1 year	8 days	2 months, practically cured
D.H.	M	1 month	5 days	19 days, practically cured
G.P.	F	2 years	3 days	35 days, much improved
L.S.	M	1 month	5 days	70 days, cured
G.W.	M	1 week	8 days	15 days, practically cured
O.W.	M	1½ years	4 days	2 months, much improved.

TABLE III

Cases where local treatment not changed when vaccine treatment begun.

M.L.	F	Eczema left leg many years.	Definitely improved in 48 days	Practically cured in 5 months
A.P.	F	Eczema hand 1 year	Greatly improved in 3 days	Practically cured in 18 days
B.C.	M	Pustular spots back neck. 2½ years	Much better in 3 days	Practically cured in 7 days
S.H.	F	Rash soles feet 1 year	Improved in 4 days	Practically cured in 28 days
M.K.	F	"Pityriasis rosea"—like rash 9 months	Clearing in 11 days no local treatment	Practically cured in 37 days
D.C.	M	Infantile eczema 7 mths. No cow's milk	Big improvement in 4 days	Practically no rash in 11 days
K.P.	M	Infantile eczema 12 mths. Goat's milk 2 weeks, no benefit	Less itching and sleeping better in 7 days	Practically cured in 30 days

TABLE IV

Cases with dramatic change although ointment was used.				
E.L.	F	Dermatitis hands 9 months	Improved in 3 days	Almost cured in 7 days
F.L.	M	Weeping dermatitis finger 7 mths follow-infected injury	Dry in 8 days	Cure in 14 days
F.M.	F	Eczema hands 10 years	Improved in 7 days	Almost normal in 19 days
A.W.	M	Dermatitis face, hands, arms, 8 years	Slightly improved in 2 days	"Cleared up" in 27 days
D.L.	M	Intertrigo, 2 months	"Much improved" in 5 days	No relapse
M.B.		Erythema, Papules and pimples, 2/ years	"Best in 2 yrs" in 7 days	Practically cured in 69 days
J.S.	M	Erythema, 15 years	Much improved in 6 days	Cured 34 days
H.P.	M	Erythema, 8 years	Much improved in 2 days	Practically cured in 67 days
H.C.	M	Erythema, 5 months	"Best in mths" in 4 days	Practically cured 12 days.
G.R.	F	Weeping eczema—dermatitis 1 year	"Much improved" in 7 days	Practically cured 28 days

ECZEMA-DERMATITIS

TABLE V

	Sex	Duration	Improvement Noted In	Final Results In
G.R.	F	1 year	7 days	28 days, practically cured
D.C.	M	7 months	4 days	28 days, practically cured
G.B.	M	1 month	4 days	40 days, cured
E.S.	M	4 years	3 days	21 days, practically cured
E.L.	F	9 months	3 days	39 days, cured
L.M.	M	8 months	8 days	50 days, cured
D.F.	M	1 year	3 days	50 days, practically cured
F.L.	M	7 months	4 days	14 days, cured
A.P.	F	1 year	3 days	13 days, practically cured
F.M.	F	10 years	7 days	26 days, cured
M.L.	F	15 years	48 days	5 months, practically cured
W.W.	M	1 year	3 days	71 days, much improved
A.W.	M	8 years	2 days	11 days, practically cured
K.P.	M	12 months	7 days	30 days, practically cured
J.B.	M	6 months	17 days	
M.G.	F	Several months	7 days	7 days, much improved
D.G.	F	2 years	3 days	18 days, cured
G.H.	M	4 weeks	4 days	11 days, practically cured
J.I.	F	3 years	5 days	56 days, cured
W.H.	F	1 week	1 day	10 days, cured
F.I.	F	2 months	7 days	Did not return
M.K.	M	1 month	4 days	1 month, much improved
J.P.	F	7 months	5 days	3 months, practically cured

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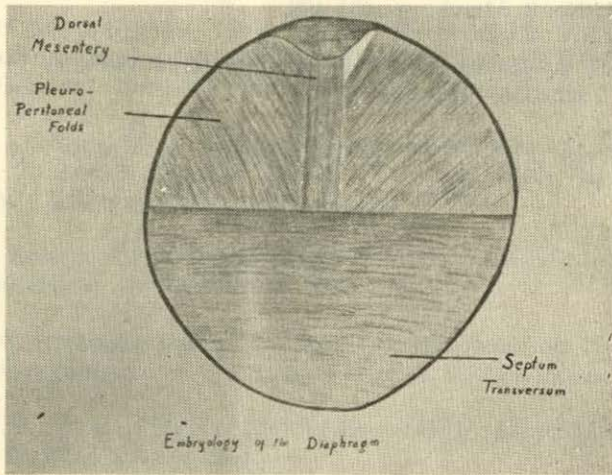
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Diaphragmatic Hernia

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DIAPHRAGMATIC hernia is a term commonly used to designate any condition in which the abdominal contents protrude into the thoracic cavity through an opening in the diaphragm. To better understand these openings a brief review of the embryology and anatomy is necessary.



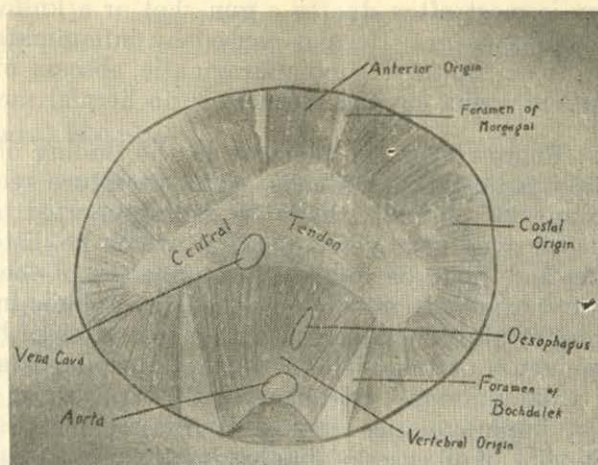
The Embryology of the Diaphragm

It is only in mammals that a completely developed diaphragm, separating the thoracic from the abdominal cavity, is found, whereas in lower animals only the pericardial cavity is separated from the abdominal cavity. So that in the early human embryo communication normally exists between the pleural and peritoneal cavities. The diaphragm which eventually separates them develops in two halves; the anterior half develops from the Septum Transversum, which descends from the cervical region down to the level of the twelfth rib.

The posterior half of the diaphragm develops from three structures;

(a) The Medial Mesentery of the fore gut extending in the mid line from the dorsal wall to the septum transversum.

(b) The Pleuro-peritoneal Folds growing inward from each lateral wall to fuse with both the medial mesentery and the septum transversum. The postero lateral portion of these pleuro peritoneal folds is the last to fuse and for a time then, there remains a defect, the pleuro peritoneal canal or Foramen of Bochdalek. If this defect or hiatus fails to close, it is the cause of a common type of diaphragmatic hernia. Maldevelopment or abnormal development of the other primitive segments may similarly cause diaphragmatic hernias.



Anatomy of the Diaphragm:

The diaphragm is a musculo-fibrous septum composed of a central fibrous tendon and a muscular periphery, arising anteriorly and laterally from the Xiphoid process of the sternum and from the inner surface of the lower six costal cartilages. Posteriorly it arises, by means of its crura, from the upper lumbar vertebrae, the vertebral origin being extended over the psoas and quadratus lumborum muscles by means of fibrous extensions which are known as the Medial and Lateral Arcuate Ligaments. Normal openings exist for the passage of the aorta, oesophagus and inferior vena cava.

Varieties of Diaphragmatic Hernia

Harrington divides hernias into (1) Traumatic and (2) Non Traumatic. A non traumatic hernia may be (a) Congenital or (b) Acquired. Congenital hernias are due to an embryological deficiency and usually are without a hernial sac. The most common sites in the probable order of frequency, according to Buckstein, are;

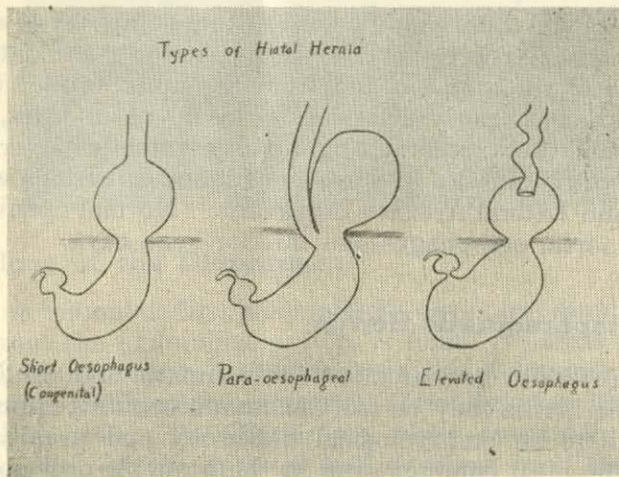
(1) through the costovertebral triangle or Foramen of Bochdalek, (2) through the dome of the diaphragm, (3) through the oesophageal hiatus, (4) through the foramen of Morgagni, and (5) through the partial absence of the hemi-diaphragm.

If acquired, those occurring through the oesophageal hiatus are the most common and they are contained in a hernial sac. Acquired hernias may also occur at all the sites mentioned under congenital types.

Traumatic diaphragmatic hernia may be due to direct or indirect injury or necrosis following inflammation. While a hernia due to indirect injury may occur at any point the most common region is the dome and posterior half of the left hemi-diaphragm. The cause is usually a severe crushing injury. When the hernia occurs through the dome of diaphragm there is usually no sac, but there is often a sac when it occurs at the oesophageal opening.

Direct injury is most often due to a gun shot or a knife wound and, of course, may occur anywhere. Hernias caused by inflammatory necrosis are often due either to a ruptured subdiaphragmatic abscess or necrosis from drainage tubes in empyema cavities. There is no hernial sac in these cases.

Incidence: Figures vary considerably in the finding of diaphragmatic hernias by routine radiological methods. The literature records incidences ranging from around 1% to 73%, the latter figure reported by Schatzki in a group of patients all over sixty years of age in which he distended the colon with air. Kirklin and Hodgson found on examination of the records of routine gastrointestinal examinations done at the Mayo Clinic in 1944 that diaphragmatic hernias of all types occurred with a frequency of between 1 and 2 percent. The incidence at the Victoria General Hospital is about 1% of all gastrointestinal examinations. Oesophageal hiatal hernias are the most common type of diaphragmatic hernia. Hernia at the oesophagus represented more than 98% of all cases of diaphragmatic hernia diagnosed by radiological methods at the Mayo Clinic in 1944. We shall limit the remainder of the discussion to this latter type of hernia.



There are several types of hernias present at the oesophageal hiatus. The first is the Congenitally Short Oesophagus with Thoracic Stomach. This is a rare condition and is not a true hernia but is just a failure of the stomach to descend below the diaphragm. The next type is the Oesophageal Hiatal Hernia with Shortened Oesophagus. In this condition the oesophagus was at one time of normal length but in the presence of a long standing hiatal hernia contractions of the longitudinal muscle fibres occur thus producing shortening. In this type, the shortened oesophagus is capable of a considerable amount of stretching, which differentiates it at the time of operation from the short oesophagus; but radiologically it cannot be differentiated from true thoracic stomach.

The third group, where the oesophagus is elevated, is the most common type. In this group the oesophago-gastric junction is above the diaphragm and the oesophagus is redundant in its lower part. This redundancy of the

lower part distinguishes it radiologically from the shortened oesophagus. The last group is the para-oesophageal type. Here the oesophago-gastric junction remains below the diaphragm and no oesophagus is found in the hernia.

Etiology of Hiatal Hernia

Since in all likelihood hiatal hernias are a combination of developmental insufficiency plus an acquired factor, both the acquired and congenital will be considered together. With advancing years the muscles of the diaphragm, as muscles elsewhere in the body, atrophy and the hiatus tends to stretch. In support of this, Buckstein states, "In the elderly, small protrusions of the stomach through the oesophageal hiatus are so common as to be considered almost a physiological concomitant of old age." Most writers state that about 80% of hiatal hernias occur in patients over forty years of age, that the condition occurs about twice as frequently in women as in men and that the majority of patients are obese. Pregnancy also is an important cause, particularly repeated pregnancies.

Clinical Symptomatology

Harrington calls the condition, "The masquerader of the upper part of the abdomen." Some individuals with diaphragmatic hernias may be asymptomatic, or the symptoms may vary with the degree and type of hernia present so that they may progress as the hernia becomes larger and because of these changing symptoms, different clinical diagnoses can be made in the same case. As more and more of the stomach becomes taken up in the hernia the attacks become more severe.

The most frequent symptom is distress after meals which is made worse if the patient lies down but is relieved to some extent if the patient assumes an erect position. Another very common symptom is substernal pain and this may lead to an erroneous diagnosis of heart disease. Other symptoms as; nausea, vomiting, belching of gas, heartburn, regurgitation of small amounts of fluid, have caused patients to be treated for cholecystitis, gastric ulcer, duodenal ulcer, and hyperacidity. Haemorrhage is not an uncommon sign, either as a haematemesis or as occult blood in the stools. This is usually from a traumatic ulcer of the gastric mucosa and is found in cases of long standing or where incarceration of the stomach has occurred. In these long standing cases, the patient loses weight because his fear of an acute attack, brought on by the ingestion of ordinary amounts of food, prevents him from eating. There may be marked secondary anaemia due to the chronic blood loss. Carcinoma of the stomach is often suspected in this type of case.

Diagnosis

Various techniques have been devised for the better demonstration of hiatal hernias during fluoroscopic examination. Templeton describes the use of the Valsalva Test, forced expiration against a closed glottis, to distinguish the phrenic ampulla and to show up a hiatus insufficiency. Other observers have used various methods of increasing intra abdominal pressure such as distending the colon with air or having the patient lie on an inflated balloon.

The technique employed at the Victoria General Hospital for routine gastrointestinal examinations is as follows:

With the patient supine on the fluoroscopic table about an ounce of barium sulphate cream is given and its course down the oesophagus is followed by the fluoroscope. After a small amount of the barium has entered the stomach, the patient is instructed to roll into the right anterior oblique position, where an unobstructed view of the lower end of the oesophagus and cardiac end of the stomach is obtained. In both the antero-posterior and oblique positions the patient is instructed to take a deep breath and to hold it, in order to observe the effect of increased intra-abdominal pressure and decreased intra-thoracic pressure on the oesophageal hiatus.

The fluoroscopic table is then raised and the patient examined in the upright position, the course of the thick barium cream being followed along the mucosal folds of the stomach. Then the patient drinks a glass of thin barium and water mixture. At first, about two ounces of the thin mixture is swallowed and its course followed through the stomach and duodenum. The patient is then turned into the right anterior oblique position and the remainder of the thin barium is swallowed. This is followed with the fluoroscope down the oesophagus and into the stomach. The examination of the stomach and duodenum is then carried out and spot films are taken. The table is again lowered, this time to ten degrees Trendelenburg with the patient supine. It is in this latter position that the cardiac end of the stomach fills the most satisfactorily. The patient is told to take a deep breath and to hold it and a spot film is taken. Lastly the patient is examined prone in ten degrees Trendelenburg, a spot film being taken as before.

Eventration of the Diaphragm

No discussion of diaphragmatic hernia would be complete without a word about eventration of the diaphragm which is often difficult to differentiate from hernia. Eventration is a rare condition where there is permanent elevation of usually the left hemi-diaphragm and it is thought to be due to a congenital aplasia of the muscle fibres.

Several methods have been suggested to differentiate the two conditions and all have their limitations. To mention a few; The Valsalva test, (forced expiration against a closed glottis). The increased thoracic pressure forces a paralyzed diaphragm leaf downward. The Mueller test, (forced inspiration with the glottis closed after expiration). Here the eventrated hemi-diaphragm rises while the opposite normal side remains stationary or even moves downward.

Another method of differentiation is by the use of pneumoperitoneum. Air injected into the peritoneal cavity will collect under the diaphragm, in the upright position, in a case of eventration. If there is a defect in the diaphragm air will pass into the thoracic cavity; provided of course, there are no adhesions between the herniated viscera and the diaphragm preventing its escape into the thorax.

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The Doctor's Dilemma*

THE physician of today finds himself in a queer spot. He and his colleagues have done such a good job of taking care of the public in the way of preventing disease, curing the sick, easing pain, lengthening the average life, finding new and better ways of doing things, and educating people in better ways of living, that the public has got itself all enthusiastic about improved health, and a better way of living. Like the fellow of old time who had a goose that laid the wonderful golden eggs, the people have become so impressed by all the miracles of modern medicine that they have become impatient of delay in reaching a medical and surgical El Dorado. They are proposing to get all the eggs at once through such a process as seems very likely to kill the hapless goose who produces the wonderful golden eggs. We may well believe that they do not know what effect their action may have upon the science and art they seem so to admire.

Recent reading has turned up a short story by Mark Twain which is a dead ringer for the situation and caused me many a merry chuckle. We recommend that the thoughtful doctor pull down his *Complete Works of Samuel L. Clemens*, and find the delightful story entitled "The Grateful Poodle." We shall paraphrase it for the purpose of brevity but recommend that it be read as Mark wrote it in the first place.

It seems that there was a kind-hearted and public-spirited physician walking along the street one day when he happened to notice a forlorn looking poodle with a broken leg. The good man took pity on the poor neglected pooch, picked him up in his arms, took him home and set the injured leg. He gave the cur a pan of milk, made a bed for him in the woodshed and left him with a friendly pat. The grateful poodle looked at Doc with worshipping eyes and kissed the helping hand. It was a good day. Both the doc and the dog felt pretty well pleased with the situation.

In a few days the grateful mutt was on his three feet and visiting among his friends where he found *another* dog with a broken leg. Well, what would you expect? Filled with love and respect for his benefactor, he took the new patient to the good doctor, who was quite pleased with the evidences of gratitude and understanding on the part of his patient. He was only too glad to take care of the newcomer, buy an extra quart of milk and fix up another bed in the woodshed. He went to bed that night knowing that he was a good man and that he was laying up merit in the world to come. How pleased he was the next morning to see both dogs upon three legs going about the business of being a dog.

Imagine his surprise as he came home that evening weary with work to find *four* dogs on his front porch—two with splinted legs and two others with untreated fractures. The kindly medico sent for more splints and spent the evening fixing up the new patients. Before going to bed he found some blankets for the additional guests in the woodshed and called the dairy, ordering two extra quarts of milk a day.

You've guessed it! The next evening there were *eight* dogs for him (honest, that's just the way Mark tells it). The four new ones had broken

*Reprinted by permission from: Monthly Bulletin Indiana State Board of Health. May, 1950.—Thurman B. Rice, M.D., Editor.

legs—compound, comminuted, dislocated and badly inflamed. Somewhat taken aback the doctor—and this was the medical profession of about 1930—began to wonder if he were running the City Free Dog Dispensary, but he set about and did the best he could. After he had finished the four emergencies, the earlier patients subtly suggested that they were getting a bit tired of milk and wondered if the legs might not heal better with a bit of dog biscuit and a little raw meat to supplement the steady milk diet. It seemed a good idea so Doc, true to his tradition, sent to the store for some dog biscuit a box of horse meat and a can of flea powder.

The following day there were *sixteen* dogs and the day after that there were *thirty-two*. Read the story yourself if you don't believe it—though I doubt if any physician will question it for a moment. The good man "hired a couple of assistants and got through the benevolent work just at midnight, first taking the precaution of calling the church to cancel his membership so that he might express himself with the latitude which the case required." (This stage of the story corresponds roughly to the socio-medical situation of about 1940, we should estimate.)

Came the dawn. After a restless night the bone-setter awakened to an unaccustomed sound. What could it be? He rose from his bed and raised the shade. To his amazement he looked out upon a massed and far-reaching multitude of clamorous and beseeching dogs of every stripe, spot and color. The noise was deafening and incoherent but after a moment he began to make out detached sentences. "We want modern medicine, we want medical, surgical and obstetrical care. We want modern hospitals, laboratory service and x-ray. The medical facilities of our state and nation are inadequate. The medical profession is wonderful in the technical sense, but the doctors themselves are thinking in terms of an archaic social program."

"Martha," yelled the long-suffering practitioner, "I've been fooled by the books; they tell only the pretty part of the story and then stop. Fetch me the shotgun; this has gone far enough."

As the doctor sallied forth with the trusty blunderbuss he stepped on the tail of the first dog (which, of course, had led the pack to his door) and which promptly bit him on the leg. It seems that the doing of good work had gone to the head of the poodle and had "engendered in him such a mighty and augmenting enthusiasm as to turn his weak head at last, and drive him mad. A month later the physician died of hydrophobia." It's the truth, we have Mark Twain's solemn word for it.

Thurman B. Rice, M.D.

The Post-Graduate Course in Surgery will be given at the Victoria General Hospital from the 11th September 1950, to 7th October 1950. This has been advanced one week to allow adequate time before the written examinations for Certification and Fellowship are held.

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