soundly a light, solid mould with a central lumen is worn until that time. Within three months of the operation the grafted skin in the new vagina is moist, corrugated, and remarkably like normal vaginal mucous membrane in appearance and feel. Intercourse can be fully satisfactory for both partners. These couples frequently adopt children.

When the vagina is absent owing to treatment for cancer, particularly when radiotherapy has been added to the surgery, there is much fibrous tissue. This may also be found in cases in which an inlay has failed. Pelvic dissection can then be difficult and the "take" of an epithelial inlay graft a little less certain. Nevertheless, the McIndoe type of operation, performed by an experienced gynaecological and plastic surgical team, offers an excellent chance of success and remains the operation of choice in Britain. In cases of cancer there is perhaps an occasional place for the old operations for vaginal reconstruction with an isolated segment of intestine, since they allow the vagina to be reconstructed at the original operation for treating the cancer. The large intestine is better than the small because it makes less mucus, but persisting vaginal mucous discharge is a major problem for these women. There is additional risk from the sigmoid anastomosis, where leakage and stenosis may occur. Stenosis has also occurred at the colo-vaginal anastomosis.

A recent report from the Mayo Clinic recommends one-stage surgical treatment of cancer and vaginal reconstruction with a segment of large intestine.[4] This represents the reintroduction of the type of reconstructive operation which fell into disrepute between the two world wars because of the problem of sepsis. Infection is still a danger, but less so since the introduction of antibiotics.

False Positive Tests for Syphilis

A patient's serum found to give positive reactions with complement-fixation or flocculation tests for syphilis with lipoidal antigens presents a difficult problem, especially when there is no clinical evidence or history of infection. Such reactions may be due to latent syphilis which may require treatment, or they may be non-specific reactions.

Their differentiation with any degree of certainty was not possible until the development of specific tests using *Treponema pallidum* as antigen, such as the treponemal immobilization test.[1] There is still no serological test which will differentiate syphilis from other treponemal diseases such as yaws. In populations with a high incidence of treponemal disease, non-specific reactions with lipoidal antigens are rare in relation to the specific results. But when the incidence is low an appreciable proportion of positive results with lipoidal antigens may be falsely positive, and J. L. Miller[2] has suggested that such reactions may be becoming more frequent.

These non-specific or biological false positive reactions are of two clinical types—an acute, transient reaction lasting a few weeks or months, and a chronic form which persists for more than six months, often for many years. The acute form usually results from an acute bacterial, viral, or protozoal infection producing fever, or from immunization procedures, such as vaccination against smallpox. It is thought to represent a reaction by some individuals whose antibody-producing mechanism is triggered off by stimuli to which the majority of people do not respond. F. W. Lynch and colleagues[3] tested 212 university students after vaccination and found that 27% were reactive to one or more of a battery of six lipoidal antigens. Reactivity was maximal 19 to 22 days after vaccination and persisted for up to 122 days; it was seen more frequently in those showing a primary response. This transient type of non-specific reaction is not at present thought to be of clinical significance for the patient.

The chronic type of non-specific reaction has attracted more attention because it has been found to be associated in some cases with serious disease, often unsuspected. The only infection in which it occurs frequently is leprosy, especially of the lepromatous type, but there is an increasing body of evidence to show that these reactions may be found in association with collagen disease, particularly systemic lupus erythematosus.[4-9]

The general experience is that the chronic non-specific reaction is commoner among women than men and is most frequent in the third decade. Such patients may have overt disease, sometimes one in which autoimmune processes may play a part, such as systemic lupus erythematosus, thyroiditis,[10] haemolytic anaemia, or polyarteritis nodosa. Other patients may be clinically normal, but laboratory tests show changes such as a raised erythrocyte sedimentation rate, increase in serum globulins, the presence of rheumatoid, L.E. cell, or antinuclear factors, anaemia, or abnormal liver function. Progression to clinically evident disease is more likely in this type of case. The non-specific reaction may often be the only abnormality found, but cases have been reported in which it was followed after several years by the development of frank lupus erythematosus.[11] Recent studies[12 13] have suggested that a high incidence of non-specific reactions may be found among elderly people, but that these are not necessarily associated with the systemic diseases frequently found with such reactions in younger patients.

The finding of a persistent non-specific reaction should call for further investigations to rule out the possibility of associated disease. Even though none is found it would seem wise to keep such patients under observation, especially if other laboratory tests show abnormal findings. A prospective study of the selective value of tests in forecasting the future development of disease in patients showing non-specific reactions might prove of great help in their management.

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The next session of the General Medical Council will open on Tuesday, 23 May, at 2.15 p.m., when the president, the Rt. Hon. Lord Cohen of Birkenhead, will take the chair and will deliver an address.