The regimen for Pergonal is to give on days 1, 3, 5... to stimulate follicular growth, in a dose of 150i.v. by i.m. injection. A pure FSH preparation (Metrodin) may also be used.

On days 10 or 12, if the follicular response is adequate, HCG may be given and the couple advised to have sexual intercourse.

If the response is not adequate the dose is increased to 300 and to 450 subsequently.

Monitoring with oestradiol levels only will not indicate the degree of follicular development i.e. two small follicles will produce as much oestradiol as of one large one.

It is best to monitor with a combination off oestradiol levels and ultrasound examination on alternate stages. The main complication to be avoided with this treatment is Hyperstimulation Syndrome.

3. LHRH pumps
LHRH pumps secrete LHRH in a particular manner, simulating the natural process. It may be administered subcutaneously or intra-venously. The pump stimulates normal pituitary function, by substituting the hypothalamus and the thereby stimulating normal follicular growth.

In theory there is no need to monitor follicular response but hyperstimulation does occur and therefore the need to monitor as with gonadotrophin therapy is necessary.

Pregnancy rates in hypothalmic, hypopituitary syndrome are good but no better than with pergonal. LHRH pumps are better physiologically but there are no data to confirm that pregnancy rates are superior.

LHRH has been applied successfully for cases of hypergonadotrophic hypogonadism (e.g. Kellman's Syndrome), multicystic and polycystic ovaries. (Armer M.A. et al, 1968)

4. Bromocryptine - Dopamine agonists
Anovulation due to hyperprolactinaemia is associated with very favourable results after treatment: 90% will get pregnant within 3 months. Bromocrytine, a dopamine agonist, reduces the level of prolactin and reduces the size and growth of prolactin-secreting adenomas. It is considered the treatment of choice with recourse to surgery being rarely necessary.

Bromocrytine is usually started in a dose of 2.5mgs b.d. and continued in a maintenance dose of 1.25mgs bd.

In cases of borderline levels of prolactin, bromocrytine will not work.

(to be continued in the next issue)

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THE EPIDEMIOLOGY OF BLOOD TRANSMISSIBLE DISEASE IN MALTA
HUGO AGIUS MUSCAT

There are two serious blood transmissible conditions that a health worker may come in contact with: Acquired Immunodeficiency Syndrome (AIDS) and Hepatitis B.

AIDS in Malta
- the epidemiological situation

The Acquired Immunodeficiency syndrome (AIDS) is caused by a retrovirus known as the Human Immunodeficiency Virus (HIV).

The following statistics refer to persons who have suffered from AIDS. Further to these, there are an estimated 50 to 100 Maltese residents who carry the HIV virus but have not (so far) developed AIDS.

By the end of 1991, 22 cases of AIDS had occurred in Maltese residents; all the persons who developed the disease before 1991 have died.

Sex distribution (Figure 2)
Of the 22 cases by the end of 1991, 21 were males, while 1 was female. The reason for the male preponderance is explained by the routes by which the disease has been transmitted.

Distribution by transmission category (Figure 3)
A number of Maltese haemophiliacs were accidentally infected with the HIV when they received blood products that were essential for the treatment of their haemophilia. This happened at a time when no one recognised the existence of the HIV. This route of transmission is now completely blocked.

In practically all the other cases of AIDS, the HIV was transmitted sexually. In 12 cases this was the result of a male homosexual relationship.

There have been no cases of AIDS in intravenous drug users (IDUs). If IDUs share needles there is a risk of rapid spread of HIV within this group of persons, and those who have sexual contact with them.

If IDUs develop AIDS, one may also expect to have cases of transmission of HIV from mother to child (transplacental or "vertical" transmission). This would eventually lead to babies and young children developing AIDS.
The age distribution of AIDS cases reflects the way HIV was transmitted:

<table>
<thead>
<tr>
<th>Age group (yrs)</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td>1</td>
</tr>
<tr>
<td>15-19</td>
<td>2</td>
</tr>
<tr>
<td>20-24</td>
<td>0</td>
</tr>
<tr>
<td>25-29</td>
<td>7</td>
</tr>
<tr>
<td>30-34</td>
<td>2</td>
</tr>
<tr>
<td>35-39</td>
<td>5</td>
</tr>
<tr>
<td>40-49</td>
<td>5</td>
</tr>
</tbody>
</table>

1992 update

So far (4th February 1992), there has been one new case of AIDS reported this year. It is not possible to release more details at this stage, other than to say that the person is male.

Hepatitis B in Malta - the epidemiological situation

The annual incidence of "infectious hepatitis" has been published in the Malta Demographic Review since 1967 (Figure 4). This figure appears to cover viral hepatitides A, B and non-A non-B. The spike in 1975 was almost certainly due to an outbreak of Hepatitis A.

Number of cases

It is only since 1987 that separate statistics are kept for cases of Hepatitis B infection, and that a clear distinction has been made in records between Hepatitis B infection and Hepatitis B virus positivity. The number of reported cases of Hepatitis B infection has tended to increase in the past five years. (Figure 5).
Regional distribution of cases

It has been suggested in the past that there is a preponderance of Hepatitis B infection in the south of Malta. The available figures were analysed by the three Medical Officers of Health (MOH) regions. It was found that, although there is a slight excess of cases in the Southern region, there is no statistical difference from the incidence in the Central and Northern regions (Figure 6). The number of cases, however, is small, so it cannot be excluded that a significant difference could emerge with greater numbers.

HBV positivity

Information on HBV positivity is scarce. Moreover, little research has been carried out on the modes of HBV transmission in Malta. Recently (January 1992) medical staff at the Health Information Systems Unit studied a random sample of 23 records relating to investigated cases of HBV positivity. The suspected transmission categories are depicted in Figure 7. In almost half of the cases, no mode of transmission could be indicated. Sexual activity, stick injuries, tattoos, shaver sharing, blood transfusion, and perinatal body fluid contact were considered to be the likely risk factors in the rest. The factor in this list which is relevant to health care delivery is, of course, stick injury.

Transmission of HBV and HIV from patient to health-care worker

Hepatitis B virus (HBV) spread

The spread of HBV is proportional to the degree of blood exposure. For highly exposed workers, e.g. surgeons and laboratory personnel, the lifetime risk of HBV infection reaches 30 to 50 percent.
Human immunodeficiency virus (HIV) spread

HIV circulates in the blood at much lower concentrations than HBV, and is not able to survive as well as HBV outside the body. It is therefore uncommon that HIV infection is acquired through health care.

Immunization and Universal Precautions.

Nowadays, health care workers can be immunized against HBV, and therefore no longer need to run the risk of having Hepatitis B.

“Universal precautions”, i.e. precautions that are taken at all times, are the cornerstone of the prevention of blood transmissible disease in general. They are particularly important for the prevention of AIDS, as immunization against HIV is not available. Universal precautions are based on the assumption that all blood is potentially infectious, regardless of its source, and of results of tests on it.

![Figure 7 - HBV POSITIVITY](image)

<table>
<thead>
<tr>
<th>Risk Factors for transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perinatal transmission</td>
</tr>
<tr>
<td>Tattoos</td>
</tr>
<tr>
<td>Stick injury</td>
</tr>
<tr>
<td>Sexual contact</td>
</tr>
<tr>
<td>Blood transfusion</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
</tbody>
</table>

Source: HISU

Components include:
- Handwashing
- Careful handling of sharps
- Proper sterilization, disinfection or disposal of instruments after use
- Appropriate use of gloves, masks, gowns, etc.

Readers are referred to the “Report on the Consultation on Prevention of HBV/HIV Transmission in the Health Care Setting”, published by WHO (Geneva), which includes specific

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NEW HOSPITAL IN DESERT SOON READY

“A terrible experience.”

That was the reaction of the representatives of the Rotary Doctor Bank, when they visited Wajir, a 'town', although we would more consider calling it a hole, out in the desert in northeast Kenya.

The worst was arriving at the hospital, built by Italian prisoners of war during the Second World War and in an atrocious state of disrepair. To carry out any kind of meaningful medical work there was practically impossible.

Now everything has changed. Enormous work has been carried out with Swedish money, one million Swedish Crowns from SIDA through the Erik’s Help Fund and 300,000 Swedish Crowns from Lions, and soon a new hospital will stand ready. The Doctor's Bank 'specialist' on this desert area by the frontiers to Somalia and Ethiopia, Doctor (and University lecturer) Carl-Axel Ekman will inspect the result, together with Bernt Einarsson from the Erik’s Help Fund who is responsible for the project. After this doctors will be sent there, primarily surgeons and orthopedists.

ECONOMICAL DIFFICULTIES

Maseno Hospital in Kenya was built by the British in 1906 and had for a long time a good reputation. After Kenya achieved independence it started to fall into disrepair. However, attempts were made to make it functional again, in part by the Doctor Bank sending surgeons and other doctors there.

"The big problem for the hospital is the economy," write the Danish doctors Thomas Castberg and Eric Thing who have worked there for the Doctor Bank.