A: Question
For women with Hepatitis B, what methods of contraception can be safely used?

B: Response
The World Health Organisation Medical Eligibility Criteria for Contraceptive Use (WHOMEC) advises that combined oral contraception (COC) should not be used by women with active viral hepatitis (WHO 4) but viral hepatitis carriers may have unrestricted use of this method. (WHO 1). The risks of COC use generally outweigh the contraceptive benefits for women with mild (compensated) cirrhosis (WHO 3). Women with severe (decompensated) cirrhosis should not use the COC (WHO 4).

For women with severe cirrhosis or active viral hepatitis, the risks of using progestogen-only contraceptives generally outweigh the contraceptive benefits (WHO 3). For women with mild cirrhosis, the benefits of using progestogen-only contraceptives generally outweigh the risks (WHO 2). Women who are viral hepatitis carriers may have unrestricted use of these methods (WHO 1). There is no restriction on the use of the copper intrauterine device (IUD) for women with active viral hepatitis (WHO Category 1).

It is not recommended that women with active viral hepatitis use hormonal contraception and they should consider use of the IUD. Clinicians must carefully evaluate and exercise their judgement for those patients who do not wish to use the IUD or barrier methods. Viral hepatitis carriers may have unrestricted use of any method.

C: Evidence-Based Medicine Question
(which guided our literature search strategy)

Population: Women with Hepatitis B

Intervention: Contraception

Outcome: Safety

Keywords: contraception; Hepatitis B; safety
D: Information Sources

The CEU searched the following sources in developing this Member’s Enquiry Response

<table>
<thead>
<tr>
<th>Source Searched</th>
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<tbody>
<tr>
<td>Existing FFPRHC and RCOG guidance</td>
<td>No relevant information</td>
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<tr>
<td>The National Guidelines Clearing House</td>
<td>No relevant information</td>
</tr>
<tr>
<td>The WHO Improving Access To Quality Care In Family Planning. Medical Eligibility Criteria For Contraceptive Use, 2004 and Selected Practice Recommendations For Contraceptive Use, 2005</td>
<td>See below</td>
</tr>
<tr>
<td>The Cochrane Library</td>
<td>No relevant information</td>
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<tr>
<td>MEDLINE and EMBASE from 1996 to 2006</td>
<td>See below</td>
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The Hepatitis B virus is one of the commonest chronic viral infections in the world with a prevalence of around 1 in 550 population in the UK. Chronic infection causes abnormal liver biochemistry, typically with a sustained increase in alanine transaminase to a level of two to three times normal. Approximately one fifth of the patients develop cirrhosis over a number of years which may result in liver failure. Infected individuals test positive for Hepatitis B surface antigen in blood. Transmission may be sexual, via blood, or vertical from mother to fetus.¹ ²

E: Evidence Reviewed

WHO Publications

The World Health Organisation Medical Eligibility Criteria for Contraceptive Use (WHO/MC)³ recommends that combined oral contraception (COC) should not be used in women with active viral hepatitis (WHO 4). Viral hepatitis carriers may have unrestricted use of this method (WHO 1). WHOMEC advises that the risks of the COC for women with mild (compensated) cirrhosis generally outweigh the contraceptive benefits (WHO 3). Women with severe (decompensated) cirrhosis are advised not to use the COC (WHO 4) as COCs are metabolised by the liver and may adversely affect women whose liver function is compromised.

For women with mild cirrhosis, the benefits of using progestogen-only contraceptives generally outweigh the risks (WHO 2). For women with severe cirrhosis or active viral hepatitis, the risks of using progestogen-only contraceptives generally outweigh the contraceptive benefits (WHO 3). Women who are viral hepatitis carriers may have unrestricted use of these methods (WHO 1).

Women with active viral hepatitis may have unrestricted use of the copper intrauterine device [IUD] (WHO 1).³

MEDLINE and EMBASE

A non-randomised comparative trial was identified which aimed to assess the safety of low dose COC in asymptomatic Hepatitis B carriers⁴ Seventy eight such women were treated with COC and 81 women served as controls. During a six-month follow-up period, there were no differences between the groups in liver function tests. This study provides support for the WHO recommendation that hormonal contraception can safely be used in hepatitis carriers.

A prospective study focused on the use of DMPA by 70 female Danish drug addicts, 23 of whom had a known history of Hepatitis B for an average duration of two years each.⁵ During the study, 13 women developed serologic and clinical signs of serum hepatitis but no change in liver function tests was observed in the women with a history of Hepatitis B.

Professionals might have concerns about insertion of an IUD in a woman with Hepatitis B because of possible risks of patient-to-professional transmission. The CEU searched Medline and Embase, but found no publications specifically addressing transmission risk associated with IUD insertion. A review of surveillance data on

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exposure of UK healthcare workers to bloodborne viruses emphasised the continuing importance of maintaining rigorous programmes of vaccination of healthcare workers.  

In conclusion, it is not recommended that women with active viral hepatitis use hormonal contraception and clinicians should carefully evaluate, and use their clinical judgement for, those patients who do not wish to use the copper IUD or barrier methods. Viral hepatitis carriers may have unrestricted use of any method.

F: References


The advice given in this Member's Enquiry Response has been prepared by the FFPRHC Clinical Effectiveness Unit team. It is based on a structured search and review of published evidence available at the date of preparation. The advice given here should be considered as guidance only. Adherence to it will not ensure a successful outcome in every case and it may not include all acceptable methods of care aimed at the same results. This response has been prepared as a service to FFPRHC members, but is not an official Faculty guidance product; Faculty guidance is produced by a different and more lengthy process. It is not intended to be construed or to serve as a standard of medical care. Such standards are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances. Members are welcome to reproduce this Response by photocopying or other means, in order to share the information with colleagues.

Enquiry Response by GS.