Methods Retrospective case note review from 2001–2012 of four patients evaluated for pulmonary arterial hypertension (PAH) at Papworth all receiving high-dose EO as part of GRAS.

Results Oestradiol (oral), Tibolone (transdermal) or privately prescribed unidentifiable “high-dose oestrogens” were received by two, one and one patients for 2, 4 and 1.5 years respectively. CTEPH was diagnosed (by accepted radiological and haemodynamic criteria) at 2, 4 and 2 years respectively after initiating oestrogens. All patients had negative thrombophilia screens and no other risk-factors for VTE or CTEPH. Three of the four patients discontinued oestrogen therapy, patient two continued with oestradiol whilst fully anti-coagulated. Table 1 outlines demographic and haemodynamic criteria.

Conclusions This series is the first to associate high-dose oestrogen therapy with chronic thromboembolic pulmonary vascular disease and should prompt suspicion of this disorder in patients undergoing GRAS with chronic effort breathlessness. Whilst the predisposition from EO in oral contraceptive or hormone replacement therapies well recognised in acute VTE, we observe four patients who developed CTEPH following high-dose oestrogen therapy two of whom did not suffer prior VTE. Animal data suggesting a protective effect of oestrogen on pulmonary vasculature in PAH is discordant with our observations but the clinical mechanisms and interpretation of our findings are likely to be more complex.

References

Abstract P140 Table 1

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<thead>
<tr>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>47</td>
<td>41</td>
<td>75</td>
</tr>
<tr>
<td>Dose of oestrogens</td>
<td>“high dose”</td>
<td>Oestradiol 6mg/day</td>
<td>Tibolone 2.5mg/day</td>
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<tr>
<td>Lead time to CTEPH diagnosis (yrs)</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>PE</td>
<td>1995</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Smoking history</td>
<td>None</td>
<td>20 pack years</td>
<td>None</td>
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<tr>
<td>Haemodynamics at diagnosis</td>
<td>Mean PAP (mmHg)</td>
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<td>43</td>
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<tr>
<td>PVR (dynes)</td>
<td>592</td>
<td>592</td>
<td>777</td>
</tr>
<tr>
<td>Cardiac index</td>
<td>2.2</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Functional level at diagnosis</td>
<td>6min walk (m)</td>
<td>295</td>
<td>384</td>
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<td>WHO class</td>
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<td>III</td>
<td>III</td>
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<tr>
<td>Radiological distribution</td>
<td>Proximal</td>
<td>Distal (non-operable)</td>
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<tr>
<td>Outcome</td>
<td>Successfully operated</td>
<td>Died 2009 of right heart failure</td>
<td>Declined surgery, still alive</td>
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Methods RADIS was used to collect all CTPA’s performed between 1st September 2011 and 31st October 2011. Notes were requested.

Inclusion criteria Ambulatory, normal heart rate, respiratory rate, blood pressure and oxygen saturations (on air), any patient who was managed acutely as an OPPEI Score < 85.

Exclusion criteria Any pre-existing in-patient that had a CTPA ordered who did not suffer VTE, any patient who had their CTPA on the same day of discharge, OP CTPA where waiting time was > 2 weeks. PESI Score > 85.

Results For the above period 105 CTPA’s were performed. Average time from request to CTPA was 4.1 hours (1–21 hours.) Figure 1 shows the excluded patients. 15 patients were included; 7 were female, average age 47 years (18–78 years). All had a PESI score < 85.11 were investigated as outpatients (1 PE +ve) and 4 were kept as inpatients (2 PE +ve). The 11 managed as outpatients resulted in 17 nights saved. The 4 inpatients (if managed as OP) could have saved an additional 6 nights.

Conclusion Over a 2 month period at our DGH most suspected PE patients (suitable for ambulatory care) are being identified resulting in significant (17 nights) bed savings.


**OUTPATIENT MANAGEMENT OF SUSPECTED PULMONARY EMBOLISM AT A DISTRICT GENERAL HOSPITAL: A TWO MONTH REVIEW**

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