INITIATION OF LONG-TERM NON-INVASIVE VENTILATION (NIV) IN A SPECIALIST RESPIRATORY FAILURE UNIT IN THE UK

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Introduction and objectives There are currently no guidelines for the provision of long-term NIV and little data into the settings and interfaces employed by different centres. Our aim was to assess long-term NIV provision in a Specialist Respiratory Failure Unit (SRFU).

Methods A retrospective observational study was performed of all patients commenced on long-term NIV by the SRFU. Data was collected from electronic patient records and technician databases on all initiations from August 2014 to January 2015.

Results Data was obtained from 113 patients. Oronasal masks were used in 87% of patients, nasal pillows in 10%, total face masks in 2% and nasal masks in 1%. Oronasal masks were used to deliver higher inspiratory positive airway pressures (IPAP) (mean ± SD 23.3 ± 5.3 cm H2O). Nasal interface use was associated with lower IPAPs (mean ± SD 12.5 ± 4.5). A relatively higher IPAP was applied at initiation to the study group (mean ± SD 23.3 ± 5.3 cm H2O and 12.4 ± 3.6 cm H2O respectively). Nasal interface use was associated with lower IPAPs (mean ± SD 12.5 ± 4.5). A relatively high pressure target

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EXPERIENCE OF A JOINT PALLIATIVE AND RESPIRATORY CLINIC ON NIV TREATMENT INITIATION IN MOTOR NEURONE DISEASE

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Introduction Signs and symptoms of ventilatory failure are a proxy for disease progression in Motor Neurone Disease (MND). Recent National Institute for Health and Clinical Excellence (NICE) guidance for MND recommends early referral to specialist palliative care (NICE, 2016) and this may help inform patient decisions around the initiation of non-invasive ventilation (NIV)

A service evaluation was conducted on a new joint palliative and respiratory clinic to determine access to specialist palliative care and the initiation of NIV in MND patients.

Methodology The joint palliative care and respiratory clinic began in September 2015, at Musgrove Park hospital, Taunton and all patients with MND were included. Electronic records were retrospectively accessed, both from the acute hospital electronic document system (EPRO) and also the palliative care database (Crosscare). The joint clinic group were compared with patients discussed in the local MND multi-disciplinary team meeting prior to initiation of the joint clinic, who had respiratory symptoms (standard care group).

Results Data was collected in 35 patients with MND. Of these, 9 did not have any respiratory symptoms and were excluded. The joint clinic group (N = 11), included 5 women (45%), mean age 67.9 (SD 8.9); in the standard care group (N = 15) there were 7 (47%) women, mean age 69.2 (7.6) years. Eighty percent of patients receiving standard care were referred to palliative care compared to 100% in the joint clinic. In the standard care group, 12 (80%) of patients were initiated on NIV compared to 5 (45%) in the joint clinic group. There were only 3 unplanned admissions in both groups and the location of patient deaths were not different.

Conclusion Attending the joint clinic appeared to improve access to palliative care services. Furthermore, patients with MND may benefit from combined palliative and respiratory care input in a joint clinic when making decisions around the initiation of NIV. Further work is needed to evaluate the role of these clinics in informing patient choice for the management of ventilatory failure in this condition.

REFERENCE

How can we improve lung cancer pathways?

TACKLING EMERGENCY LUNG CANCER ADMISSIONS

RV Reddy, Y Valli, M Naarem. Kettering General Hospital, Kettering, UK

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Introduction A significant proportion of lung cancer patients present as an emergency. This is associated with poor one year survival. Many of these patients have had contact with health services before presenting as an emergency. It is estimated that one in five lung cancer patients have an unplanned admission before their urgent clinic appointment.1

Objective To reduce the number of emergency lung cancer admissions by providing an effective alternative ambulatory pathway for high risk patients.

Methods Patients referred on the two week wait pathway are vetted by the respiratory physicians. Those identified as having a high risk of admission are prioritised and reviewed urgently on the ambulatory care unit usually by the next working day. Patients with the following features were expedited:
1. Superior vena caval obstruction
2. Liver function abnormalities
3. Large tumour burden on chest radiograph
4. Severe symptoms such as pain and breathlessness
5. Large pleural effusion.

Abstract P78 Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Incidence of lung cancer (Total no. of admissions (% of lung cancer incidence))</th>
<th>Length of stay (Total bed-days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kettering 2012–13</td>
<td>195 / 108 (55%)</td>
<td>11.6 / 1253</td>
</tr>
<tr>
<td>General 2014–15</td>
<td>195 / 67 (34%)</td>
<td>8.1 / 543</td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>England 2012–13</td>
<td>33,231 / 18,878 (56%)</td>
<td>8.9 / 168,014</td>
</tr>
<tr>
<td>&amp; 2014–15</td>
<td>30,765 / 17,281 (56%)</td>
<td>8.9 / 153,800</td>
</tr>
</tbody>
</table>

Patients with suspected lung cancer presenting to the emergency department were also re-directed to the ambulatory care unit whenever feasible. We evaluated the service for a period of 12 months from October 2014 and compared it with the 12 month period prior to the commissioning of the ambulatory care unit in June 2013. As part of the service, the team developed an innovative lung cancer diagnostic service utilising ultrasound guidance to facilitate early diagnosis.

Results Table 1 demonstrates the resulting drop in unplanned lung cancer admissions and length of stay. We estimate a cost saving of £170,000 based on a 710 bed-day reduction (£300/bed-day) after taking into consideration physician time. If rolled out nationally, reducing the admission rate to 34% of the lung cancer incidence will avoid 6800 admissions (>55,000 bed-days) with significant cost savings and benefits to patients.

Conclusion Flexible pathways are cost effective and prevent emergency admission of lung cancer patients which is associated with high mortality. This novel approach is easily adoptable widely and would have a significant impact across NHS.

REFERENCE