EFFICACY OF A BALANCE AND FALL PREVENTION CENTER ON THE NUMER OF FALLERS, FALLS AND INJURIOUS FALLS RATE IN OLDER FALLERS : A BEFORE AND AFTER STUDY

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CONFLICT OF INTEREST DISCLOSURE

No potential conflict of interest to report
FALLS : A MAJOR CAUSE OF BURDEN AND DEATH
• Hospitalization
• Traumatic and psychological complications
• Loss of autonomy
• Institutionalization

FALLS PREVENTION : ONE OF THE KEYSTONES OF « ACTIVE AND HEALTHY AGEING »
(EUROPEAN INNOVATION PARTNERSHIP)
• Reduce of 10% the number of hospitalizations due to falls

INTEREST OF FALL CLINICS IN THIS CONTEXT?
OBJECTIVE

• Reduce the number of falls and the number of fallers 3 months after compared to 3 months before a multidisciplinary consultation

• Reduce the number of falls and the number of fallers 6 months after compared to 6 months before consultation

• Reduce the number of complications at 6 months

• Assess the autonomy and fear of falling
Patients aged 65 and more admitted to the Balance and Fall Prevention Center between September 2014 and September 2015 having experienced at least one fall in the previous year.
METHOD

Geriatric Synthesis: Multidisciplinary care

Tailored Care Plan

Paramedical Assessment

Occupational therapist
Physiotherapist
Podiatrist

Medical Assessment

Geriatrician
Neurologist
Rehabilitation Specialist
RESULTS

195 patients admitted
- 35 excluded

160 patients included
- 23 lost from follow up
- 3 incomplete data

134 patients
- Mean age of 81.6 yrs
- 93 female, 41 male
- 86% out patients
- Mean ADL = 5
- High risk of falling
MAIN OUTCOME

• Number of falls

<table>
<thead>
<tr>
<th>Number of falls</th>
<th>Mean (+-SD)</th>
<th>Median (min-max)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-3 to M+3</td>
<td>-2.97 (+-10.32)</td>
<td>-1.00 (-90.00; 1.00)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>M-6 to M+6</td>
<td>-5.22 (+-20.65)</td>
<td>-2.00 (180.00;11.00)</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

• Number of fallers

- 62% at 3 months
- 64% at 6 months
MAIN OUTCOME

- **Decrease** in the number of **major complications** from 31% to 6% (p<0.001) at 6 months
SECONDARY OUTCOMES

- **Autonomy** maintained at 6 months: ADL score from 5.06 to 4.84
- **Mobility** inside and outside was maintained
- **Fear of falling** reduced

![Chart showing fear of falling at M0 vs M6](chart.png)
### SECONDARY OUTCOMES

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Proposed (%)</th>
<th>Followed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapy</td>
<td>80%</td>
<td>88%</td>
</tr>
<tr>
<td>Podiatry</td>
<td>54%</td>
<td>73%</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>43.5%</td>
<td>58%</td>
</tr>
<tr>
<td>Physical activity</td>
<td>21%</td>
<td>47%</td>
</tr>
<tr>
<td>Specialists referral</td>
<td>57%</td>
<td>86%</td>
</tr>
<tr>
<td>Drug modifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Discontinuation</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>- Decrease</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>- Increase</td>
<td>5%</td>
<td>82%</td>
</tr>
<tr>
<td>- Introduction</td>
<td>64%</td>
<td></td>
</tr>
</tbody>
</table>

**Drug Discontinuation:**
- 34% of psychotropics
- 19% anti hypertensive
- 11% of statins

**Drug Introduction:**
- 46% Vitamin D supplementation
- 33% anti osteoporosis
SECONDARY OUTCOMES

• Patient satisfaction level was high
CONCLUSION

• Multidisciplinary care reduces
  - Significantly the number of falls
  - The number of fallers by -62% at 3 months
  - The number of major complications by 5 at 6 months

• Recommendations were well followed

• Patients were satisfied
CONCLUSION

• Fall prevention needs to be a priority in geriatric care
• Developing Fall Prevention Centres should be a common objective in Europe
THANK YOU FOR YOUR ATTENTION!