CONDUCTING THERAPEUTIC CARDIOVASCULAR EDUCATION PROGRAMS:
IN CORONARY AND POLYVASCULAR PATIENTS

Dr Marianne Lafitte
Cardiologue
Doctorante en sciences de l’éducation
Centre d'Exploration de Prévention et de Traitement de l'Athérosclérose
Hôpital cardiologique du Haut Lévêque, CHU Bordeaux

JESFC, Paris, 17 Janvier 2013
Déclaration de Relations Professionnelles - Disclosure Statement of Financial Interest

J'ai actuellement, ou j'ai eu au cours des deux dernières années, une affiliation ou des intérêts financiers ou intérêts de tout ordre avec une société commerciale ou je reçois une rémunération ou des redevances ou des octrois de recherche d'une société commerciale :

I currently have, or have had over the last two years, an affiliation or financial interests or interests of any order with a company or I receive compensation or fees or research grants with a commercial company:

<table>
<thead>
<tr>
<th>Affiliation/Financial Relationship</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant/Research Support</td>
<td>None</td>
</tr>
<tr>
<td>Consulting Fees/Honoraria</td>
<td>None</td>
</tr>
<tr>
<td>Major Stock Shareholder/Equity</td>
<td>None</td>
</tr>
<tr>
<td>Royalty Income</td>
<td>None</td>
</tr>
<tr>
<td>Ownership/Founder</td>
<td>None</td>
</tr>
<tr>
<td>Intellectual Property Rights</td>
<td>None</td>
</tr>
<tr>
<td>Other Financial Benefit</td>
<td>None</td>
</tr>
</tbody>
</table>
General remarks
General remarks (1): Atheroma: a chronic disease with acute CV events

- Lifetime consequences:
  - Life habits and health behaviors
  - Treatment
  - Regular follow-up and evaluations
  - Doctors on a very regular basis

- Non predictable crisis with traumatic consequences
Modify daily behaviours (eating, physical activity, stop smoking!)

Follow daily therapeutic prescriptions

Call 15 immediately in case of symptoms

IF…

They are well informed and understand the options

They get sufficient skills and ressources to take care of their health

The diagnosis and prescription are up-dated and adapted
  - To the disease
  - To the patient

General remarks (3): Nowadays, CV prognosis of chronic patients relies on themselves…
And…

- As anyone, they don’t want to die / have a bad health
  Patients operate daily activities for their health, depending on:
  - Their life
  - Their personal ressources

General remarks (4): CV prognosis of chronic patients relies on themselves…

Highlight ‘what is done’, for a better health

Therapeutic education
General remarks (6):
« Therapeutic education »: are we ready?

We aim to treat the disease...
Are we ready to change our posture?

- **Ordonnance, prescription médicale** >> **négociation, alliance thérapeutique**
- **Règles hygiéno-diététiques** >> **accompagner le changement**
- **Surveillance bio-médicale** >> **suivi, accompagnement, auto-surveillance**
- **Observance (obéissance)** >> **adhésion au projet de soins**
Specificities of coronary and polyvascular patients
Specificities of coronary and polyvascular patients (1): temporality

Disease

Therapeutic education
Major importance of the temporality

- Acute CV events affect patients
  - post traumatic syndrom
  - Anxiety
  - Depression
  - Adaptation to new condition and contraints

- Health system well organized for acute care and cure
  - Chronic phase difficult to coordinate
  - Therapeutic education transplanted on the problem

Données CEPTA, oct 2012

100 non depressive patients with a first MI 9 months follow-up
Specificities of coronary and polyvascular patients (2): need for PII improvement!

- Large improvements in acute management
- Secondary prevention failure
- Call for prevention!!

Professional comprehensive multidisciplinary ambulatory preventive cardiology programmes should be available for all coronary patients

“Prevention Centres”

www.escardio.org
Risk of subsequent CV events

- In patients with important atheroma burden and polyvascular disease
- In patients with high residual CV risk
- In patients with poor therapeutic adhesion
CV doctors and staff tend to translate recommended scientific evidences (eat healthy food, practice physical activity, take your pills and stop smoking) into educational programs.
Call for action aimed at meeting needs of patients may be different

- « Therapeutic education is aimed at helping patients acquire ou improve their skills, in order to better live with a chronic disease (...), be informed of their disease, treatments, health care, and health behaviours; It is aimed at helping them keep and improve their health and quality of life » (HAS 2007)
How to operate?
In practice: Who?

- **Multi-disciplinarity:**
  - Doctors, nurses, pharmacologist, diabetetician, psychologist, physiotherapist, expert patients...

- **Trained team**
  - In therapeutic education
  - With in-site continued training and education
  - With optimized collaboration and communication
  - Using same language and homogenous posture
  - Avoiding contradictory messages

- **Communication with other doctors and health professionals**
In practice: What?

- Individual assessment (bilan éducatif)
- Individual consults and interventions
- Collective workshops
- With adapted educative methods
  - Avoiding saturation of the memory >> step by step, with realistic objectives
- Depending on the time from CV event, adaptation of the patient to stress and disease
In practice: How?

- Therapeutic education must not be separated from « best medical care » otherwise doomed to failure
- Prescriptions must be adapted to:
  - The disease
  - Life habits
  - Avoid side effects
  - With take-pills schedule adapted to patient’s life
- Therapeutic education must consider health stakes individually discussed
- Value all patients’ efforts and think long-term
In practice: When?

- When the patients want it
- When health system can offer it
  - During hospitalization:
    - Mental availability of patients
    - Mental availability of health professionals
    - Close but differentiated from exams and medical care
  - During rehabilitation program
  - Ambulatory education
- As long as needed, never short-term
In practice: Where?

- In-hospital
- In-prevention and/or rehabilitation centers
- In doctors or other health practice
- In any place, patient-accessible
- At home (telephone coaching)
Our experience
Bordeaux Cardiologic hospital

- Unit dedicated to patients with chronic atheroma disease
- Detection, Prevention and Treatment of atheroma disease
- Includes therapeutic education
- A full trained team
- Initiation during short hospitalization
- Ambulatory long-term education
Patients: high CV risk

> 4000 patients 2002-2012; moyenne d’âge 59,8 ans
2 programs with ARS agreement

- Education thérapeutique pour les patients à haut risque cardiovasculaire: environ 350 patients / an

- Education thérapeutique pour les malades avec artérite des membres inférieurs claudicants: environ 30 patients / an
Program and follow-up

Patients à haut risque

Événement CV

Médecin traitant
Cardiologue
+/- réadaptation

CEPTA ETP

3 mois

Médecin traitant
Cardiologue

CEPTA suivi éducatif

18 mois et +

Évaluation fonction cardiaque et ischémie, athérosclérose, facteurs de risque.
Optimisation traitement
Education thérapeutique et diététique
<table>
<thead>
<tr>
<th></th>
<th>J1</th>
<th>J2</th>
<th>J3</th>
<th>J4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENTREES</strong></td>
<td><strong>8H30 ATELIERS IDE</strong></td>
<td><strong>8H30 ATELIERS IDE</strong></td>
<td><strong>Bilan en groupe: SERVICE ETP</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DIAGNOSTIC</strong></td>
<td><strong>1 et 2</strong></td>
<td><strong>3 et 4</strong></td>
<td><strong>9H00 VISITE et sorties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATIF</strong></td>
<td><strong>SERVICE ETP</strong></td>
<td><strong>SERVICE ETP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DIAGNOSTIC</strong></td>
<td><strong>ATELIER VIVRE AVEC UNE MALADIE</strong></td>
<td><strong>14H00 ATELIER MARCHE</strong></td>
<td><strong>ETP AMBULATOIRE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATIF</strong></td>
<td><strong>SERVICE ETP</strong></td>
<td><strong>PARC PARC HT LEVEQUE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td><strong>BILAN INDIVIDUEL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMENS COMPLEMENTAIRES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STAFF MEDICAL</strong></td>
<td><strong>15H00 STAFF EDUCATIF</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Risk improvement after CEPTA + ETP

660 patients: Risk factors of post ACS patients at entrance and at follow-up (18 mo)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>3 months (N=660)</th>
<th>Follow-up (N=638)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyslipidaemia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cholesterol (mmol/L)</td>
<td>5.07 ± 1.0</td>
<td>4.69 ± 0.9</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>LDL cholesterol (mmol/L)</td>
<td>3.00 ± 0.8</td>
<td>2.72 ± 0.7</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>% of patients with LDL &gt; 3.35 mmol/L</td>
<td>33.1</td>
<td>18.5</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>% of patients presenting with risk factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 risk factor</td>
<td>28.1</td>
<td>42.5</td>
<td>0.00001</td>
</tr>
<tr>
<td>1 risk factor</td>
<td>33.0</td>
<td>34.2</td>
<td></td>
</tr>
<tr>
<td>2 risk factors</td>
<td>25.6</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>3 risk factors</td>
<td>9.5</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>4 risk factors</td>
<td>2.8</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>5 risk factors</td>
<td>0.9</td>
<td>0.4</td>
<td></td>
</tr>
</tbody>
</table>

Lafitte et Al, Archives of Cardiovascular Disease (2008)
Low morbid-mortality of well-treated polyvascular patients

Major CV event

Sabouret et Al, ACVD 2008; Lafitte et Al, ACVD 2008
Program for patients with PAD

- On top of High risk program
- In order to help those patients adapt to specific constraints and provide specific solutions to their needs
  - Atheroma disease and consequences
  - Pain and handicap
  - Social and professional consequences
  - A more-advanced disease
- Provides specific methods aimed at improving self confidence, empowerment, autonomy, motivation, social support and pain control
Program for patients with PAD

High risk program and medical follow-up

M1
Test-In / Train-out
+ ETP

M2

M3
No supervision

M6

M12
No supervision

- Educational workshops
- Outside exercise session
- Individual evaluation (Strandness)
- Individual interview
- Telephone coaching

- Educational workshops
- Outside exercise session
- Individual evaluation (Strandness)
- Individual interview
- CV risk evaluation
Résultats du programme AOMI

<table>
<thead>
<tr>
<th></th>
<th>M0</th>
<th>M3</th>
<th>M6</th>
<th>M12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strandness test</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First pain during effort (meters)</td>
<td>98.9+/-88</td>
<td>171.0+/-184*</td>
<td>119.0+/-49.3</td>
<td>240+/-154*</td>
</tr>
<tr>
<td>Maximal distance (meters)</td>
<td>300.5+/-239</td>
<td>372.5+/-241</td>
<td>530.4+/-235*</td>
<td>563+/-211*</td>
</tr>
<tr>
<td>Pain rating scale (1-10)</td>
<td>6.0+/-2</td>
<td>5.2+/-2</td>
<td>4.77+/-3.6</td>
<td>3.29+/-3.4*</td>
</tr>
<tr>
<td><strong>Time for 5 chair stands (sec)</strong></td>
<td>9.35+/-2</td>
<td>8.99+/-1.95</td>
<td>8.29+/-1.37**</td>
<td>6.95+/-1***</td>
</tr>
<tr>
<td><strong>Peripheral Vascular Disease</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right ABI at rest</td>
<td>0.81+/-0.17</td>
<td></td>
<td>0.86+/-0.14</td>
<td>0.81+/-0.11</td>
</tr>
<tr>
<td>Left ABI at rest</td>
<td>0.76+/-0.16</td>
<td></td>
<td>0.84+/-0.16</td>
<td>0.91+/-0.16</td>
</tr>
<tr>
<td>Right ABI after strandness</td>
<td>0.50+/-0.23</td>
<td></td>
<td>0.55+/-0.19</td>
<td>0.48+/-0.08</td>
</tr>
<tr>
<td>Left ABI after strandness</td>
<td>0.45+/-0.18</td>
<td></td>
<td>0.58+/-0.19</td>
<td>0.64+/-0.13</td>
</tr>
</tbody>
</table>
Évolution du SF-36

- Physical composite score
- Mental composite score

Mois 0  |  Mois 3  |  Mois 6  |  Mois 12

submitted
The future
Next step for our center

Prise en charge médicale optimale

3 mois 1 an 2 ans 5 ans

Evénement CV
7 jours
Inclusion
Randomisation centralisée

Critère de jugement principal:
score de risque

Critère de jugement secondaire:
morbi-mortalité

Prise en charge médicale optimale
+ Programme ETP du CEPTA
Thank you!