IN PREPARING FOR HIS BIG SPEECH THORTON PRACTICES FREEZING MINDLESSLY IN FRONT OF A MIRROR.
THE BACKGROUND
WHAT IS SYNCOPE?

- A sudden, temporary, reversible loss of consciousness associated with loss of postural tone
- Due to an abrupt reduction or loss of cerebral perfusion

Pre-syncope = ‘dizziness’
- ‘you’re half way there’
WHY BOTHER WITH SYNCOPE

• Common medical problem – ‘A low risk, high stakes condition’
  • Broad differential diagnosis; syncope is a symptom
  • Syncope is common (NICE 2010)
    • 1-6% medical admissions (up to 266,000 annually)
    • 3% ED visits (550,000 annually)
    • In the over 65’s: 23% will have syncope over a 10 year period with 30% recurrence over 2 years – thus 1.9 million people over 10 years in this age group
  • 60% of syncope patients may get admitted
    • After admission, only 50% will receive a diagnosis
    • After admission, only 50% will have specific tests to diagnose their syncope
  • Diagnostic tests have a low yield
IT’S EXTREMELY EXPENSIVE!

- **US HEALTHCARE UTILIZATION PROJECT (2011)**
  - Discharge diagnosis of syncope: $3.8 BILLION = $8700 per admission
  - Oft-reported original study: $2.4Billion at 2000 prices.
    - Asthma $2.8B, HIV $2.2B

- **ITALIAN EXTRAPOLATION (2006)**
  - 20% population of US
  - €179 Million (€942M if in US, $1.2B)

Sun. Prog Cardiovasc Dis. 2013
Sun. Am J Cardiol. 2005
Brignole. Europace. 2006
WHY IS IT DIFFICULT?

• Multitude of causes crossing many medical specialties
  • Cardiology
  • Neurology
  • Elderly care
  • GIM
  • ED
  • ENT / Audiovestibular medicine
CAUSES
DEFINING THE CAUSE (1)

Syncope in the context of T-LOC

Clinical presentation

- Loss of consciousness?
  - Yes: Falls
  - No: Transient? Rapid onset? Short duration? Spontaneous recovery?
    - Yes: Coma, Aborted SCD, Other
    - No: Altered consciousness

T-LOC

- Non-traumatic
  - Syncope
- Traumatic
  - Epileptic seizure
  - Psychogenic
  - Rare causes
DEFINING THE CAUSE (2)

SYNCOPE

REFLEX SYNDROMES
ORTHOSTATIC HYPOTENSION
ARRHYTHMIC
STRUCTURAL
SYNCOPE MIMICS

• Acute intoxication (e.g., alcohol)
• Seizures
• Sleep disorders
• Somatization disorder (psychogenic pseudo-syncope)
• Trauma/concussion
• Hypoglycaemia
• Hyperventilation
THE CAUSES OF SYNCOPE (1)

Table 6  Frequency of the causes of syncope in general population, Emergency Department and specialized clinical settings from some recent studies

<table>
<thead>
<tr>
<th>Source</th>
<th>Reflex, %</th>
<th>OH, %</th>
<th>Cardiac, %</th>
<th>Non-syncopal T-LOCs, %</th>
<th>Unexplained, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED</td>
<td>35</td>
<td>6</td>
<td>21</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Ammirati[29]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarasin[35]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blanc[30]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disertori[34]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ode Nordkamp[39]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>35–48</td>
<td>4–24</td>
<td>5–21</td>
<td>8–20</td>
<td>17–33</td>
</tr>
<tr>
<td>Syncope Unit (dedicated facility)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alboni[48]</td>
<td>56</td>
<td>2</td>
<td>23</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Chen[46]</td>
<td>56</td>
<td>6</td>
<td>37</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Shon[21,3]</td>
<td>65</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Briguglio[64]</td>
<td>65</td>
<td>10</td>
<td>13</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Ammirati[42]</td>
<td>73</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Range</td>
<td>56–73</td>
<td>1–10</td>
<td>6–37</td>
<td>1–6</td>
<td>5–20</td>
</tr>
</tbody>
</table>

Note: Some differences in diagnostic definitions.

ED = Emergency Department; OH = orthostatic hypotension; T-LOC = transient loss of consciousness.
THE CAUSES OF SYNCOPE (2)

Table 7  Frequency of the causes of syncope according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Source</th>
<th>Reflex, %</th>
<th>OH, %</th>
<th>Cardiovascular, %</th>
<th>Non-syncopal T-LOCs, %</th>
<th>Unexplained, %</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40 years</td>
<td>Olde Nordkamp[28]</td>
<td>51</td>
<td>2.5</td>
<td>1.1</td>
<td>18</td>
<td>27</td>
<td>ED and chest pain unit</td>
</tr>
<tr>
<td>40–60 years</td>
<td>Olde-Nordkamp[28]</td>
<td>37</td>
<td>6</td>
<td>3</td>
<td>19</td>
<td>34</td>
<td>ED and chest pain unit</td>
</tr>
<tr>
<td>&lt;65 years</td>
<td>Del Rosso[16]</td>
<td>58.5</td>
<td>0.5</td>
<td>12</td>
<td>-</td>
<td>19</td>
<td>Cardiology Department</td>
</tr>
<tr>
<td>&gt;60/65 years</td>
<td>Del Rosso[32]</td>
<td>52</td>
<td>3</td>
<td>34</td>
<td>-</td>
<td>11</td>
<td>Cardiology Department</td>
</tr>
<tr>
<td></td>
<td>Ungar[56]</td>
<td>62</td>
<td>8</td>
<td>11</td>
<td>-</td>
<td>14</td>
<td>Geriatric Department</td>
</tr>
<tr>
<td></td>
<td>Olde-Nordkamp[28]</td>
<td>25</td>
<td>8.5</td>
<td>13</td>
<td>12.5</td>
<td>41</td>
<td>ED and chest pain unit</td>
</tr>
<tr>
<td>&gt;75 years</td>
<td>Ungar[56]</td>
<td>36</td>
<td>30</td>
<td>16</td>
<td>-</td>
<td>9</td>
<td>Geriatric department. In further 8% of patients the diagnosis was multifactorial or drug related</td>
</tr>
</tbody>
</table>

ED = Emergency Department; OH = orthostatic hypotension; T-LOC = transient loss of consciousness.
INITIAL ASSESSMENT OF THE SYNCOPE PATIENT
BE AFRAID....BE VERY AFRAID....
REMEMBER THE DIFFERENTIAL

- Reflex Syndromes
- Orthostatic Hypotension
- Arrhythmic
- Structural
DETAILED PATIENT HISTORY

• **CIRCUMSTANCES OF RECENT EVENT**
  - Eyewitness account of event
  - Symptoms at onset of event
  - Sequelae
  - Medications

• **CIRCUMSTANCES OF **ALL** REMOTE EVENTS**

• **CONCOMITANT DISEASE, ESPECIALLY CARDIAC**

• **PERTINENT FAMILY HISTORY**
  - Cardiac disease
  - Sudden death

• **PAST MEDICAL HISTORY**
  - Neurological history

Thijs RD et al. J Neurol 2009;256: 155-167
NICE HELP WITH DIAGNOSIS

• **DIAGNOSE UNCOMPPLICATED FAINT IF:**
  • **NO ALTERNATIVE CAUSE**
  • **POSTURE, PROVOKING FACTORS, PRODROME**

• **SUSPECT OH IF:**
  • **NO ALTERNATIVE CAUSE**
  • **HISTORY TYPICAL**

• **CONSIDER CARDIAC IF:**
  • **HEART FAILURE**
  • **T-LOC DURING EXERTION**
  • **FH OF SUDDEN CARDIAC DEATH**
  • **NEW BREATHLESSNESS**

• **SUSPECT EPILEPSY IF:**
  • **BITTERN TONGUE**
  • **HEAD TURNED DURING T-LOC**
  • **NO MEMORY OF ABNORMAL BEHAVIOUR AROUND T-LOC**
  • **UNUSUAL POSTURING**
  • **PROLONGED LIMP JERKING**
  • **CONFUSION AFTERWARDS**
  • **PRODROMAL DEJA / JAMAISS VU**
The difficulties with symptoms (1)

- **Patient factors:**
  - Patient unconscious at the time; asymptomatic at evaluation
  - Only 25% may seek medical attention
  - Mixture of features in one event – MSA with syncope and fall
  - Patients may suffer different forms of syncope at different times
  - Amnesia for the event; may even have amnesia for the amnesia

- **Witness factors:**
  - Witness accounts may be inaccurate or conflicting; critical features may not be recognised
  - Un-witnessed often
THE DIFFICULTIES WITH SYMPTOMS (2)

• **Doctors factors:**
  - Variable frequencies of different diagnoses depending on assessing doctor
  - Causes overlap many different specialties – different knowledge, different emphasis on diagnostic / therapeutic process
  - Doctors catastrophize
  - Experts may disagree over the diagnosis

• **The history can make the diagnosis in reflex syncope, other diagnoses require testing**

• **Language difficulties**
  - Does the patient understand what we mean e.g. dizziness?
  - Do we understand what the patient means e.g. supine T-LOC?
SIMPLE ‘INVESTIGATIONS’

- Clinical examination
- Lying and standing BP
- Consider CSM
- ECG
Orbostatic syncope is diagnosed when there is documentation of orbostatic hypotension associated with syncope or pre-syncope. Orbostatic blood pressure measurements are recommended after 5 min of lying supine. Measurements are then continued after 1 or 3 min of standing and further continued, if blood pressure is still falling at 3 min. If the patient does not tolerate standing for this period, the lowest systolic blood pressure during the upright posture should be recorded. A decrease in systolic blood pressure $\geq 20$ mmHg or a decrease of systolic blood pressure to $<90$ mmHg is defined as orbostatic hypotension regardless of whether or not symptoms occur$^{[49]}$. 
ECG FINDINGS (1)

Diagnostic:

- Sinus bradycardia $<$ 40 beats $\cdot$ min$^{-1}$ or repetitive sinoatrial blocks or sinus pauses $>$ 3 s
- Mobitz II 2nd or 3rd-degree atrioventricular block
- Alternating left and right bundle branch block
- Rapid paroxysmal supraventricular tachycardia or ventricular tachycardia
- Pacemaker malfunction with cardiac pauses
**ECG FINDINGS (2)**

Suggestive:

<table>
<thead>
<tr>
<th>Table 2.3  ECG abnormalities suggesting an arrhythmic syncope</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bifascicular block (defined as either left bundle branch block or right bundle branch block combined with left anterior or left posterior fascicular block)</td>
</tr>
<tr>
<td>• Other intraventricular conduction abnormalities (QRS duration $\geq 0.12$ s)</td>
</tr>
<tr>
<td>• Mobitz I second degree atrioventricular block</td>
</tr>
<tr>
<td>• Asymptomatic sinus bradycardia ($&lt; 50$ beats $\cdot$ min$^{-1}$) or sinoatrial block</td>
</tr>
<tr>
<td>• Pre-excited QRS complexes</td>
</tr>
<tr>
<td>• Prolonged QT interval</td>
</tr>
<tr>
<td>• Right bundle branch block pattern with ST-elevation in leads $V_1$-$V_3$ (Brugada syndrome)</td>
</tr>
<tr>
<td>• Negative T waves in right precordial leads, epsilon waves and ventricular late potentials suggestive of arrhythmogenic right ventricular dysplasia</td>
</tr>
<tr>
<td>• Q waves suggesting myocardial infarction</td>
</tr>
</tbody>
</table>
RISK ASSESSMENT
SYNCOPE AND RISK

• Syncope is ‘a low risk, high stakes condition’
  • 0.7% die within 1 month
  • 7.5% severe outcome in ED
  • 4.5% severe outcome within 1 month of discharge

• Patients and physicians perceive the risk to be greater (we catastrophize): management is often over-cautious

• Most of the assessment of syncope patients is by the GP or in the ED
  • Time constraints
  • Inexperienced physicians
PROGNOSIS IN SYNCOPE

• THE MISSION:
  • TO DEFINE WHICH PATIENTS ARE AT RISK OF DEATH AND INJURY......
  • TO TRY TO PREVENT SERIOUS EVENTS
  • WITHOUT INCREASING UNNECESSARY ADMISSIONS

Soteriades, NEJM, 2002
<table>
<thead>
<tr>
<th>Condition</th>
<th>ESC</th>
<th>NICE</th>
<th>CANADA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural heart disease / CHF</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Syncope on exercise</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>FH of SCD</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Abnormal ECG</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Severe anaemia</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Electrolyte abnormality</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New shortness of breath / murmur</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>No prodrome (&gt;65y/o)</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Hypotension</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Age over 60</td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

NB NOT EVERY CARDIAC PATIENT WILL HAVE HAD A CARDIAC T-LOC
INVESTIGATIONS
PICTURE (1)

- Prospective, multicentre, observational study of ILR use in syncope.
- N=570
- 71 centres in 11 countries

- Follow-up 10±6 months
- 91% for unexplained syncope
- Average age 61±17 years, 54% women

Edvardsson et al, Europace, 2011
68% received ILR at the end of the diagnostic work-up

47% had seen neurology

On average patients had seen 3 different specialists

Median number of tests performed 13 (9-20)

Table 2 History of diagnostic tests performed before ILR implant

<table>
<thead>
<tr>
<th>Test</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total recruitment</td>
<td>570</td>
</tr>
<tr>
<td>Standard ECG</td>
<td>556</td>
</tr>
<tr>
<td>Echocardiography</td>
<td>490</td>
</tr>
<tr>
<td>Basic laboratory tests</td>
<td>488</td>
</tr>
<tr>
<td>Ambulatory ECG monitoring</td>
<td>382</td>
</tr>
<tr>
<td>In-hospital ECG monitoring</td>
<td>311</td>
</tr>
<tr>
<td>Exercise testing</td>
<td>297</td>
</tr>
<tr>
<td>Orthostatic blood pressure meas</td>
<td>275</td>
</tr>
<tr>
<td>MRI / CT scan</td>
<td>267</td>
</tr>
<tr>
<td>Neurological or psychiatric eval</td>
<td>270</td>
</tr>
<tr>
<td>EEG</td>
<td>222</td>
</tr>
<tr>
<td>Carotid sinus massage</td>
<td>205</td>
</tr>
<tr>
<td>Tilt test</td>
<td>201</td>
</tr>
<tr>
<td>Electrophysiology testing</td>
<td>144</td>
</tr>
<tr>
<td>Coronary angiography</td>
<td>133</td>
</tr>
<tr>
<td>External loop recording</td>
<td>67</td>
</tr>
<tr>
<td>ATP test</td>
<td>15</td>
</tr>
<tr>
<td>Other tests</td>
<td>52</td>
</tr>
<tr>
<td>No tests performed</td>
<td>1</td>
</tr>
</tbody>
</table>

Edvardsson et al, Europace, 2011
## Tests Aren’t Always That Helpful

<table>
<thead>
<tr>
<th>TEST</th>
<th>COST / MEANINGFUL DIAGNOSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEG</td>
<td>$32973</td>
</tr>
<tr>
<td>HEAD CT</td>
<td>$24881</td>
</tr>
<tr>
<td>CARDIAC ENZYMES</td>
<td>$22937</td>
</tr>
<tr>
<td>TN</td>
<td>$4813</td>
</tr>
<tr>
<td>CAROTID USS</td>
<td>$19580</td>
</tr>
<tr>
<td>HEAD MRI</td>
<td>$8678</td>
</tr>
<tr>
<td>ETT</td>
<td>$8415</td>
</tr>
<tr>
<td>ECHO</td>
<td>$6272</td>
</tr>
<tr>
<td>ECG</td>
<td>$1020</td>
</tr>
<tr>
<td>TELEMETRY</td>
<td>$710</td>
</tr>
<tr>
<td>POSTURAL BP</td>
<td>$17</td>
</tr>
</tbody>
</table>
VARIATION IN INVESTIGATION

- ED admissions to 28 general hospitals; an assessment of practice

- Enormous inter-departmental and inter-hospital variation

<table>
<thead>
<tr>
<th>Test performed*</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrocardiography</td>
<td>81–100%</td>
</tr>
<tr>
<td>Basic laboratory tests</td>
<td>31–100%</td>
</tr>
<tr>
<td>Chest X-ray</td>
<td>0–80%</td>
</tr>
<tr>
<td>Brain CT scan and/or MRI scan</td>
<td>0–60%</td>
</tr>
<tr>
<td>Prolonged ECG monitoring</td>
<td>3–90%</td>
</tr>
<tr>
<td>Carotid sinus massage</td>
<td>0–58%</td>
</tr>
<tr>
<td>Carotid echo-Doppler</td>
<td>0–43%</td>
</tr>
<tr>
<td>Electroencephalography</td>
<td>3–77%</td>
</tr>
<tr>
<td>Echocardiography</td>
<td>3–65%</td>
</tr>
<tr>
<td>Tilt testing</td>
<td>0–50%</td>
</tr>
<tr>
<td>Abdominal ultrasound examination</td>
<td>0–18%</td>
</tr>
<tr>
<td>Electrophysiological study</td>
<td>0–24%</td>
</tr>
<tr>
<td>Coronary angiography</td>
<td>0–9%</td>
</tr>
<tr>
<td>Exercise test</td>
<td>0–6%</td>
</tr>
<tr>
<td>Miscellaneous (≥1 test per patient)</td>
<td>0–38%</td>
</tr>
<tr>
<td>Mean no. of tests per patient</td>
<td>2–5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialist consultations</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiological</td>
<td>0–100%</td>
</tr>
<tr>
<td>Neurological</td>
<td>0–54%</td>
</tr>
<tr>
<td>Otorhinolaryngological</td>
<td>0–11%</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>0–4%</td>
</tr>
</tbody>
</table>

THE DIAGNOSTIC METHOD

• **What could we do?**
  
  • Do all the tests we can think of to include/exclude all known diagnoses – ‘the standard out-patient approach’

  • Admit the patient, get bored after a few days, discharge them and hope they come back on someone else’s take – ‘the standard in-patient approach’

  • Follow them around until the event happens in front of you – ‘stalking’

  • Follow them around remotely – the **Reveal**....
OTHER TESTS TO CONSIDER

• HOLTER (ONLY IF THE EVENTS ARE FREQUENT ENOUGH)
• ECHO FOR RISK STRATIFICATION
• TILT
• (EPS / CARDIAC MRI / ANGIOGRAM / EXERCISE TEST)
NICE GUIDANCE ON TILTS

- **Identified 272 Studies**
- **Excluded 151**
- **Analysed 121, of which 41 analysed diagnostic accuracy**

**Conclusion:**

- **A poor test**
- **Only offer where episodes are recurrent/severe where an induced bradycardia will lead to pacing....**

Use it instead as an activation – is that what happened?
SYNCOPE

REFLEX SYNDROMES
ORTHOSTATIC HYPOTENSION
ARRHYTHMIC
STRUCTURAL

ORTHOSTATIC TEST
REVEAL
ECHO
TREATMENT

• Make the diagnosis if you can

• Risk stratify

• Treat the cause if you can e.g. pacemaker, ICD, ablation

• Reassure the fainters and offer simple advice
  • Little evidence in fainters
NON-DRUG TREATMENT FOR OH AND THE REFLEX SYNCOPE
**Initial approach**

1. Counseling and reassurance
   - explanation
   - avoidance of triggering events:
     - standing still for prolonged periods
     - high environmental temperature (including hot showers and baths)
     - sudden head-up postural change (especially on waking)
     - straining during micturition and defecation
     - hyperventilation
     - fasting
     - excessive alcohol intake
     - drugs with vasodepressor properties
   - normal salt/water intake
2. Physical counter-maneuvers (see Table 3)
   - leg crossing and muscle tensing
   - squatting
3. Psychological deconditioning

*To be considered in recurrent syncope*

4. Increase in dietary salt intake
   - daily salt intake of at least 10 grams (180 mmol) a day
   - weight gain of about 1–2 kg
5. Water drinking
   - 2–2.5 liter fluid/day
   - avoidance of dark urine
6. Physical exercise
7. Head-up sleeping
8. Tilt training
9. Abdominal binders and elastic stockings
DRUG TREATMENT FOR THE REFLEX SYNCOPE
**Vasovagal Syncope**

**Potential Treatments**

**Vasoconstriction**
- $\alpha_1$ agonists (midodrine)
- $\alpha_2$ antagonists (yohimbine)
- $\alpha_2$ agonists (clonidine)
- Amphetamines (methylphenidate)
- Adenosine antagonists (theophylline)

**Increase circulating volume:**
- Fludrocortisone, ddAVP

**Central Actions**
- SSRIs
- Amphetamines
- Pyridostigmine

**Anticholinergic**
- Disopyramide
- Scopolamine

**Negative Inotropes**
- $\beta$-blockers
- Disopyramide
DRUGS FOR VVS

• **Give anything a try if you have experience with it and if the patient is desperate enough...**
  
  • **Beta-blockers – little good evidence of benefit (POST 1)**
  
  • **Fludrocortisone – little good evidence of benefit in VVS (POST 2)**
  
  • **SSRI – little good evidence of benefit**

• **Midodrine - POST 4**

• **Beta-blockers, potentially over 42 y/o - POST 5**

• **Re-evaluate the diagnosis if events are that troublesome? Wrong diagnosis e.g. psychogenic? More pervasive autonomic disorder e.g. POTS**
TO CONCLUDE

• SYNCOPE HAS MANY CAUSES
• MAKE IT SIMPLE AND ASSESS IT LOGICALLY
• RISK STRATIFY
• TREAT THE CAUSE
• REASSURE THE FAINTERS
• WORK TOGETHER WITH COLLEAGUES ESPECIALLY IF THE EVENTS ARE FREQUENT, ODD OR NOT SETTLING WITH STANDARD TREATMENT
...AND ON THAT BOMB-SHELL...

THANK YOU FOR YOUR ATTENTION