Partydrugs

Past, present, future
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Netherlands
Past

- China: opium
- Rome: wine
- South America: coca leaves
- 60-70’s: LSD
Partydrugs

• Present
  – Drugs used
  – Treatment strategies
Partydrugs

• XTC
• GHB
• Speed
• Ketamin
• Mushrooms
• Poppers
• Cocaine
XTC
XTC

• **Mechanism**
  – **Serotonin:**
    • Enhanced release of serotonin in the brain.
    • neurotransmitter influences emotion, appetite, sleep
    • Entactogenic
  – **Dopamine:**
    • stimulatory effect
XTC

- **Active component:**
  - MDMA (3-methoxy-4,5methylenedioxy-amfetamine)
  - 1-1,5 mg/kg

- **Duration:**
  - Starts 20 to 60 minutes
  - 4-7 hours

- **Problems:**
  - Hyperthermia
  - Tachycardia
  - Hypertension
  - Hyponatriaemia
  - Psychosis
  - liverdysfunction / acute liver failure
  - Muscle cramps/ jaw cramps
XTC

- After-effect (4-7 hours): days of dysfunctioning
  - Tuesday blues
- Less alert (Serotonin depletion)
- Memory loss
- Long term effects? Probably brain damage. 
  (Evidence is slowly accumulating)
XTC

• Problems with quality
  – PMA (paramethoxyamphetamine)
  – PMMA (paramethoxy-N-methylamphetamin)
  – Atropin

• Problems with quantity
  – How much does a tablet contain?
Tablets may contain between 35 to 300 mg
XTC

• Other alternatives for XTC
  – MDEA: more stimulatory, less entactogenic
    • 3,4-METHYLENEDIOXY-N-ETHYLAMPHETAMIN
  – MDA: as strong as MDMA, more hallucinogenic
    • 3,4-methylenedioxyamphetamine
  – MDBD
    • 2-Methylamino-1-(3,4-Methylenedioxyphenyl)Butane
  – MCPP: stronger than MDMA, acts later
    • meta-chloor phenyl piperazin
  – Mephedrone: 4-methylmethcathinon
• Mephedrone
XTC
GHB

- Gammahydroxybutyric acid
- Action
  - Within minutes
  - 3-4 hours
- Small margin of dosis
  - 0,75 gram for acquired effect
  - > 2,5 gram coma and convulsions
GHB

- **Effect:**
  - Relaxation
  - Sexual arousal

- **With higher dosage:**
  - Nausea
  - Dizziness
  - Coma/respiratory arrest
  - Bradycardia
  - Mild hypothermia
  - Mild hypotension
GHB

• Danger of apnea and vomiting
  – Risk increases when used in combination with alcohol or other depressant drugs
GHB

- Commonly sold as liquid
- Tablets are also available
GHB alternative

- **GBL (Gamma-butyrolactone)**
  - Precursor of GHB
  - Acts longer
  - Same amount of fluid is 2 x stronger
  - Sold as:

![GBL Super Cleaner](GBLSupercleaner.png)

*GBL cleaner is designed to be used on cleaning chrome wheels and removing graffiti.*
GHB

- Evolving into major health problem
- Addictive
  - Sleep deprivation
  - Treatment with GHB tapered under strict medical supervision
  - Used by bodybuilders as alternative anabolic steroids
Ketamine
Ketamine

- Sedative/ analgesic
- Dyssociative feelings (seperation between body and mind)
  - Near death experience: K-hole
- Larger amount are sedative
- Chances of psychosis
- Due to analgesic effect unaware of injuries
Ketamine

- Fast acting: in minutes
- Lasts uptill 1 or 2 hours.
- Sold as Ketanest!
- Stolen from veterinarians
Cocaine
Cocaine

• Popular with older, more wealthy participant
• Chic drug
• Rebound phenomenon.
Cocaine

- Effects:
  - Stimulatory
  - Suppresses fatigue
  - Suppresses hunger
- Acts within minutes
- Ends within ½ to 1 hours
Cocaine

• dangers:
  – Vasoconstriction
  – Bronchospasm
  – Pulmonary edema
  – Coronary spasm/heart attack/cardiac arrest
  – Aorta dissection
  – Pneumomediastinum
Mushrooms
Mushrooms

• Contains:
  – Psylocybine
  – Psylocine

• No direct physical harm ....

• Great risks with using poisonous mushrooms
Mushrooms

- Enhances existing emotions
- Visual hallucinations
- Altered feelings in space and time
- LSD effect
Treatment

• Try to discover which drug has been used
• Determine depth of coma.
• Toxicology screening doesn't give answer quickly
• Lab: Na, CK en liverfunctions
  – heart enzymes if cocaine is suspected
Drug testing

<table>
<thead>
<tr>
<th></th>
<th>blood</th>
<th>urine</th>
<th>saliva</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDMA</td>
<td>3-4 days</td>
<td>1-3 days</td>
<td></td>
</tr>
<tr>
<td>GHB</td>
<td></td>
<td>&lt; 12 hours</td>
<td></td>
</tr>
<tr>
<td>Ketamin</td>
<td></td>
<td>48 hours</td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td>5-8 days</td>
<td>2-5 days</td>
<td></td>
</tr>
</tbody>
</table>
Treatment

• Unconscious patients may need ventilation
• Hyperthermia must be rigorously treated
  – Active cooling
  – Fluid resuscitation
  – Benzodiazepines
• Hyponatraemia resolved
• Liver functions monitored
• Rhabdomyolysis monitored and treated if necessary
Treatment

- Cocaïne abuse
- Up the hill – down the hill
  - Bloodpressure regulation controle
  - Benzodiazepines
  - prevent vasospasm (Nitroglycerin)
  - carbo
- Considerations:
  - alfa-blockers (ketensin, labetolol)
  - Calciumantagonists
Partydrugs

• Future?
Thanks