A BRIEF GUIDE TO SELECTED COMMON PAINKILLERS

THERE ARE TWO MAIN CLASSES OF PAINKILLERS - PARACETAMOL IS AN EXCEPTION.

**Key:**
- N: Non-steroidal anti-inflammatory drugs
- P: Paracetamol
- O: Opioid analgesics

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**ASPIRIN**
- More commonly prescribed for blood clot prevention
- Salicylate drug
- TRADE NAMES: Aspirin, Acuprin, Ecotrin
- Inhibits cyclo-oxygenase enzymes, (COX) preventing formation of prostaglandins and reducing inflammation & pain.

**IBUPROFEN**
- Potential for serious side effects less than other NSAIDs
- A phenylpropanoic acid
- TRADE NAMES: Advil, Nurofen, Motrin, Brufen
- Exact mode of action unknown. However, it is known to inhibit COX enzymes, and thus the formation of prostaglandins.

**TRAMADOL**
- Metabolised in the body to a more potent opioid
- Synthetic opioid
- TRADE NAMES: Ryozit, Tranal, Ultram
- Binds to opioid receptors in the central nervous system, & inhibits noradrenaline & serotonin reuptake, inhibiting pain transmission.

**MORPHINE**
- The first individual plant alkaloid ever isolated
- Naturally occurring opioid
- TRADE NAMES: MS Contin, Oramorph, Sevredol
- Precise mechanism unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**HYDROMORPHONE**
- Mostly used intravenously in a hospital setting
- Semi-synthetic opioid
- TRADE NAMES: Palladone, Dilaudid
- Precise mechanism unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**BUPRENORPHINE**
- Also commonly used to treat opioid dependence
- Semi-synthetic opioid
- TRADE NAMES: Suboxone, Subutex, Zubsolv
- Precise mechanism unknown; binds to opioid receptors in the central nervous system. Also has potent local anaesthetic properties.

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**PARACETAMOL**
- A.K.A. Acetaminophen, or Tylenol in the USA
- Antipyretic analgesic
- TRADE NAMES: Acetaminophen, Tylenol, Panadol
- Mode of action not well understood; it's thought it may act in a similar manner to aspirin, but also have effects in the brain.

**CODEINE**
- Naturally occurring opioid
- TRADE NAMES: Co-codamol (with paracetamol)
- Precise mode of action unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**HYDROCODONE**
- Around 99% of worldwide supply consumed in the USA
- Semi-synthetic opioid
- TRADE NAMES: Vicodin (with paracetamol)
- Precise mode of action unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**OXYCODONE**
- One of the most abused prescription opioids
- Semi-synthetic opioid
- TRADE NAMES: Roxicodone, OxyContin, Oxecta
- Precise mode of action unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**METHADONE**
- Commonly used to prevent heroin withdrawal symptoms
- Synthetic opioid
- TRADE NAMES: Methadose, Dolophine, Symoron
- Precise mode of action unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

**FENTANYL**
- Often used for pain relief during surgical procedures
- Synthetic opioid
- TRADE NAMES: Actiq, Durogesic, Abstral
- Precise mode of action unknown; binds to opioid receptors in the central nervous system responsible for transmitting pain.

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**Note:** Potency values are for oral administration. Numeric measures of potency are variable; the figures given are merely general approximations, and can be affected by a number of factors.

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