

# Acetaminophen Davis Drug Guide

212

BRITISH MEDICAL JOURNAL 24 JANUARY 1976

and holding them with that degree of certainty which the evidence warrants" to the use of heparin in either disseminated intravascular coagulation or immune complex disease, you don't use it. Samuel Butler gave another view, that "life is the art of drawing significant conclusions from insufficient evidence," and I have no doubt that some would have treated the patient with heparin. The patient died and who knows if the treatment was right or wrong?

#### APPOINTMENTS OF SPEAKERS

- (1) Professor G P McNicol, MD, FRCS, head of department of medicine, University of Leeds
- (2) Dr S H Taylor, BSC, FRCS, senior lecturer in medicine, deputy director of cardiovascular unit, University of Leeds.

- (3) Dr M F Dixon, MR, MRCPATH, lecturer in pathology, University of Leeds.
- (4) Professor A G W Whitfield, FRCS, MRCP, emeritus professor of medicine, University of Birmingham.
- (5) Dr R Freeman, MB, ChB, lecturer in bacteriology, University of Leeds.

#### References

- <sup>1</sup> Garrod, L P, Lambert, H P, and O'Grady, F, *Antibiotic and Chemotherapy*, p 314. London, Livingstone, 1973.
- <sup>2</sup> Weinstein, L, and Schlesinger, J, *Progress in Cardiovascular Diseases*, 1973, 16, 275.
- <sup>3</sup> Tu, W H, Shearn, M A, and Lee, J C, *Annals of Internal Medicine*, 1969, 71, 335.
- <sup>4</sup> Gutman, R A, et al, *Medicine*, 1972, 51, 1.
- <sup>5</sup> Baggenstoss, A H, *American Journal of Pathology*, 1948, 24, 1003.

## Hospital Topics

### Why do people use paracetamol for suicide?

B G GAZZARD, M DAVIS, J SPOONER, ROGER WILLIAMS

*British Medical Journal*, 1976, 1, 212-213

#### Summary

A questionnaire to assess motives for choosing paracetamol as a suicidal agent was completed by 107 patients admitted after an overdose of the drug. None of the 48 patients interviewed would have chosen paracetamol had they known that there would be an interval of two to three days before the onset of serious symptoms. Only five of the patients had obtained the drug on prescription, but the remainder had obtained it easily from a retail pharmacy. There was no apparent reason for the preference for paracetamol. It would be difficult to restrict the availability of paracetamol, and educating the public about the effects of an overdose would be more appropriate.

#### Introduction

Taking an overdose of a drug is now so common that it warrants the description of "the modern epidemic." In Britain at least 15% of acute adult medical admissions to hospital are for self-poisoning.<sup>1</sup> This amounts to some 100 000 admissions a year in England and Wales, a figure that has nearly doubled since 1965.<sup>2</sup> One analysis has shown that the chief agents used

are sedatives, tranquillisers, and antidepressants,<sup>1</sup> and they accounted for over 2300 deaths in Great Britain in 1973.<sup>3</sup> In the same year analgesic preparations containing salicylates and paracetamol caused 17% of hospital admissions for self-poisoning,<sup>1</sup> and no fewer than 201 patients died from salicylate overdose, and 66 from paracetamol.<sup>4</sup>

In strong contrast to the effects of an overdose of salicylates or of sedative and antidepressant drugs, taking large quantities of paracetamol does not lead to rapid loss of consciousness. Apart from some early nausea and vomiting due to gastric irritation the patient may feel quite well until hepatic necrosis develops some two to three days later.<sup>5</sup> Nevertheless, in spite of its lack of immediate clinical toxicity there has recently been an increasing number of cases of overdose with paracetamol, while the incidence of deaths from salicylates has remained fairly constant.<sup>1-3,6</sup>

In view of the different effects of overdose with paracetamol compared with other agents, we studied the reasons for selecting the drug for self-poisoning to try and identify means of dealing with this abuse. We asked patients who had taken an overdose of paracetamol to complete a questionnaire.

#### Patients and methods

The questionnaire asked four basic questions: how were the tablets obtained; were they originally obtained specifically for taking an overdose; why was paracetamol chosen in preference to other drugs; and did you know that liver failure was a feature of paracetamol overdose? The patients were also asked whether they would have taken the same quantity if the tablets had been foil-wrapped.

A total of 107 patients (69 females and 38 males) answered the questionnaire. Forty-eight of them were interviewed and completed the questionnaire while they were still in hospital and 31 were interviewed as outpatients; the remaining 28 completed it by post. All these patients had been admitted to the liver unit at King's College Hospital, but, as some of them had been transferred from other hospitals after developing hepatic dysfunction, probably relatively more had taken a hepatotoxic overdose of paracetamol than might have been admitted to a general hospital. The study was carried out

Liver Unit and Medical School, King's College, London SE5 8RX  
B G GAZZARD, MB, MRCP, research fellow (present address: Whipps Cross Hospital, London E11)  
M DAVIS, MB, MRCP, senior lecturer and honorary consultant physician  
ROGER WILLIAMS, MD, FRCP, consultant physician and director of unit  
Winthrop Laboratories, Sterling-Winthrop House, Surbiton-upon-Thames, Surrey  
J SPOONER, MB, BChir, senior medical director

## UNDERSTANDING ACETAMINOPHEN: AN OVERVIEW

ACETAMINOPHEN, A WIDELY USED ANALGESIC AND ANTIPYRETIC MEDICATION, IS OFTEN INCLUDED IN THE DAVIS DRUG GUIDE DUE TO ITS EXTENSIVE APPLICATION IN BOTH CLINICAL AND HOME SETTINGS. THIS MEDICATION IS PRIMARILY UTILIZED FOR THE RELIEF OF MILD TO MODERATE PAIN AND FOR REDUCING FEVER. ACETAMINOPHEN IS KNOWN FOR ITS EFFECTIVENESS AND IS A COMMON CHOICE FOR INDIVIDUALS SEEKING A SAFE AND WELL-TOLERATED PAIN MANAGEMENT OPTION.

# WHAT IS ACETAMINOPHEN?

ACETAMINOPHEN, ALSO KNOWN AS PARACETAMOL, IS A NON-OPIOID ANALGESIC THAT IS AVAILABLE BOTH OVER-THE-COUNTER (OTC) AND BY PRESCRIPTION. IT IS OFTEN FOUND IN VARIOUS FORMULATIONS, INCLUDING TABLETS, CAPSULES, LIQUID SUSPENSIONS, AND SUPPOSITORIES. THE DRUG ACTS PRIMARILY IN THE CENTRAL NERVOUS SYSTEM, INHIBITING THE SYNTHESIS OF PROSTAGLANDINS, WHICH ARE CHEMICAL MESSENGERS THAT PROMOTE INFLAMMATION AND PAIN.

## MECHANISM OF ACTION

ACETAMINOPHEN'S EXACT MECHANISM OF ACTION IS NOT FULLY UNDERSTOOD, BUT IT IS BELIEVED TO WORK THROUGH THE FOLLOWING PATHWAYS:

1. **INHIBITION OF PROSTAGLANDIN SYNTHESIS:** ACETAMINOPHEN REDUCES THE PRODUCTION OF PROSTAGLANDINS IN THE BRAIN, WHICH HELPS ALLEVIATE PAIN AND REDUCE FEVER.
2. **INTERACTION WITH CANNABINOID RECEPTORS:** SOME RESEARCH SUGGESTS ACETAMINOPHEN MAY ENHANCE THE EFFECTS OF THE BODY'S OWN ENDOCANNABINOIDS, WHICH CAN AFFECT PAIN PERCEPTION.
3. **ACTIVATION OF DESCENDING PAIN CONTROL PATHWAYS:** ACETAMINOPHEN MAY ACTIVATE CERTAIN PATHWAYS IN THE BRAIN THAT INHIBIT PAIN TRANSMISSION.

## INDICATIONS FOR USE

ACETAMINOPHEN IS INDICATED FOR A VARIETY OF CONDITIONS, INCLUDING:

- MILD TO MODERATE PAIN RELIEF (E.G., HEADACHES, TOOTHACHES, MENSTRUAL CRAMPS)
- REDUCTION OF FEVER IN ADULTS AND CHILDREN
- MANAGEMENT OF PAIN ASSOCIATED WITH OSTEOARTHRITIS
- ADJUNCT THERAPY FOR PAIN RELIEF FOLLOWING SURGICAL PROCEDURES

## DOSAGE AND ADMINISTRATION

THE DOSAGE OF ACETAMINOPHEN CAN VARY BASED ON AGE, WEIGHT, AND SPECIFIC HEALTH CONDITIONS. THE FOLLOWING GENERAL GUIDELINES CAN HELP OPTIMIZE ITS USE:

### ADULTS

- THE STANDARD DOSE FOR ADULTS IS TYPICALLY 500 MG TO 1000 MG EVERY 4 TO 6 HOURS AS NEEDED, NOT EXCEEDING 4000 MG IN A 24-HOUR PERIOD.

## CHILDREN

- FOR CHILDREN, THE DOSAGE IS USUALLY DETERMINED BY WEIGHT. THE GENERAL RECOMMENDATION IS 10-15 MG/KG PER DOSE, WITH A MAXIMUM OF 5 DOSES IN A 24-HOUR PERIOD.

## SPECIAL CONSIDERATIONS

- PATIENTS WITH LIVER DISEASE OR CHRONIC ALCOHOL USE SHOULD CONSULT A HEALTHCARE PROVIDER BEFORE USING ACETAMINOPHEN, AS THEY MAY BE AT INCREASED RISK FOR LIVER TOXICITY.

## SIDE EFFECTS AND PRECAUTIONS

WHILE ACETAMINOPHEN IS GENERALLY CONSIDERED SAFE WHEN USED AS DIRECTED, IT CAN HAVE SIDE EFFECTS AND POTENTIAL RISKS, INCLUDING:

- **COMMON SIDE EFFECTS:** NAUSEA, VOMITING, STOMACH PAIN, AND RASH.
- **SEVERE REACTIONS:** ALLERGIC REACTIONS, SKIN REACTIONS SUCH AS STEVENS-JOHNSON SYNDROME, AND LIVER DAMAGE FROM OVERDOSING.

## LIVER TOXICITY

ONE OF THE MOST SIGNIFICANT RISKS ASSOCIATED WITH ACETAMINOPHEN IS HEPATIC TOXICITY, WHICH CAN OCCUR WITH DOSES EXCEEDING THE RECOMMENDED LIMITS OR IN INDIVIDUALS WITH PRE-EXISTING LIVER CONDITIONS. SIGNS OF LIVER DAMAGE MAY INCLUDE:

- JAUNDICE (YELLOWING OF THE SKIN AND EYES)
- DARK URINE
- SEVERE FATIGUE
- ABDOMINAL SWELLING OR PAIN

## DRUG INTERACTIONS

ACETAMINOPHEN CAN INTERACT WITH SEVERAL MEDICATIONS, WHICH MAY ENHANCE THE RISK OF SIDE EFFECTS OR ALTER THE DRUG'S EFFECTIVENESS. SOME NOTABLE INTERACTIONS INCLUDE:

- **WARFARIN:** REGULAR USE OF ACETAMINOPHEN CAN INCREASE THE ANTICOAGULANT EFFECT OF WARFARIN, RAISING THE RISK OF BLEEDING.
- **ALCOHOL:** CONCURRENT USE OF ACETAMINOPHEN AND ALCOHOL CAN SIGNIFICANTLY INCREASE THE RISK OF LIVER DAMAGE.
- **ANTICONSULSANTS:** MEDICATIONS SUCH AS PHENYTOIN AND CARBAMAZEPINE CAN LOWER ACETAMINOPHEN LEVELS,

POTENTIALLY REDUCING ITS EFFECTIVENESS.

## ACETAMINOPHEN IN SPECIAL POPULATIONS

WHEN CONSIDERING ACETAMINOPHEN USE, CERTAIN POPULATIONS REQUIRE SPECIAL ATTENTION:

### PREGNANT AND NURSING WOMEN

ACETAMINOPHEN IS OFTEN CONSIDERED THE ANALGESIC OF CHOICE DURING PREGNANCY AND BREASTFEEDING, AS IT HAS A FAVORABLE SAFETY PROFILE. HOWEVER, IT IS ESSENTIAL FOR PREGNANT WOMEN TO CONSULT HEALTHCARE PROVIDERS BEFORE USE TO ENSURE PROPER DOSING AND MONITORING.

### OLDER ADULTS

OLDER ADULTS MAY BE MORE SUSCEPTIBLE TO THE SIDE EFFECTS OF ACETAMINOPHEN. IT IS ADVISABLE TO START WITH THE LOWEST EFFECTIVE DOSE AND CLOSELY MONITOR FOR ANY ADVERSE EFFECTS.

## CONCLUSION

ACETAMINOPHEN IS A VERSATILE AND COMMONLY USED MEDICATION INDICATED FOR PAIN RELIEF AND FEVER REDUCTION. ITS INCLUSION IN THE DAVIS DRUG GUIDE HIGHLIGHTS ITS SIGNIFICANCE IN CLINICAL PRACTICE. WHILE GENERALLY SAFE AND EFFECTIVE, IT IS ESSENTIAL TO ADHERE TO DOSING GUIDELINES, BE AWARE OF POTENTIAL SIDE EFFECTS, AND RECOGNIZE THE IMPORTANCE OF CONSULTING HEALTHCARE PROFESSIONALS IN SPECIAL POPULATIONS. BY UNDERSTANDING ACETAMINOPHEN'S INDICATIONS, MECHANISMS, AND PRECAUTIONS, PATIENTS CAN USE THIS MEDICATION SAFELY AND EFFECTIVELY, ENHANCING THEIR OVERALL HEALTH AND WELL-BEING.

## FREQUENTLY ASKED QUESTIONS

### WHAT IS ACETAMINOPHEN COMMONLY USED FOR ACCORDING TO THE DAVIS DRUG GUIDE?

ACETAMINOPHEN IS COMMONLY USED TO RELIEVE PAIN AND REDUCE FEVER.

### WHAT ARE THE COMMON SIDE EFFECTS OF ACETAMINOPHEN AS LISTED IN THE DAVIS DRUG GUIDE?

COMMON SIDE EFFECTS MAY INCLUDE NAUSEA, VOMITING, AND ABDOMINAL PAIN.

### WHAT IS THE MAXIMUM RECOMMENDED DOSAGE OF ACETAMINOPHEN FOR ADULTS?

THE MAXIMUM RECOMMENDED DOSAGE FOR ADULTS IS TYPICALLY 4,000 MG PER DAY, BUT IT'S IMPORTANT TO FOLLOW SPECIFIC GUIDELINES AND CONSULT A HEALTHCARE PROVIDER.

### CAN ACETAMINOPHEN BE TAKEN WITH ALCOHOL ACCORDING TO THE DAVIS DRUG

## GUIDE?

THE DAVIS DRUG GUIDE ADVISES CAUTION WHEN TAKING ACETAMINOPHEN WITH ALCOHOL DUE TO THE INCREASED RISK OF LIVER DAMAGE.

## WHAT SHOULD BE MONITORED WHEN A PATIENT IS ON ACETAMINOPHEN THERAPY?

LIVER FUNCTION TESTS SHOULD BE MONITORED, ESPECIALLY IN PATIENTS TAKING HIGH DOSES OR THOSE WITH LIVER IMPAIRMENT.

## IS ACETAMINOPHEN SAFE DURING PREGNANCY ACCORDING TO THE DAVIS DRUG GUIDE?

ACETAMINOPHEN IS GENERALLY CONSIDERED SAFE DURING PREGNANCY, BUT IT IS ALWAYS BEST TO CONSULT WITH A HEALTHCARE PROVIDER.

## WHAT ARE THE CONTRAINDICATIONS FOR ACETAMINOPHEN USE?

CONTRAINDICATIONS INCLUDE SEVERE LIVER DISEASE AND HYPERSENSITIVITY TO ACETAMINOPHEN.

## HOW DOES ACETAMINOPHEN DIFFER FROM NSAIDS ACCORDING TO THE DAVIS DRUG GUIDE?

ACETAMINOPHEN PRIMARILY ACTS AS AN ANALGESIC AND ANTIPYRETIC, WHEREAS NSAIDS ALSO PROVIDE ANTI-INFLAMMATORY EFFECTS.

## WHAT SPECIAL POPULATIONS SHOULD BE CAUTIOUS WHEN USING ACETAMINOPHEN?

INDIVIDUALS WITH PRE-EXISTING LIVER CONDITIONS, CHRONIC ALCOHOL USE, AND THOSE ON CERTAIN MEDICATIONS SHOULD USE ACETAMINOPHEN WITH CAUTION.

## WHAT ARE THE SIGNS OF ACETAMINOPHEN OVERDOSE AS PER THE DAVIS DRUG GUIDE?

SIGNS OF OVERDOSE MAY INCLUDE NAUSEA, VOMITING, LOSS OF APPETITE, CONFUSION, AND JAUNDICE.

Find other PDF article:

<https://soc.up.edu.ph/49-flash/files?dataid=RNI07-6553&title=pt-cpi-web-assessment.pdf>

## [Acetaminophen Davis Drug Guide](#)

### **Acetaminophen Uses, Dosage & Side Effects - Drugs.com**

Aug 6, 2023 · Acetaminophen is a widely used pain reliever and fever reducer for conditions like headaches, arthritis, colds, and flu, available OTC and in prescriptions.

### **Acetaminophen Dosage Guide + Max Dose, Adjustments**

Jan 16, 2024 · Detailed Acetaminophen dosage information for adults and children. Includes dosages for Pain and Fever; plus renal, liver and dialysis adjustments.

### **Tylenol: Uses, Dosage, Side Effects, Warnings - Drugs.com**

Feb 29, 2024 · Tylenol is a pain reliever and a fever reducer used to treat many conditions such as headaches, muscle aches, arthritis, cramps and fevers.

## **Acetaminophen Side Effects: Common, Severe, Long Term**

Jun 17, 2025 · Learn about the side effects of acetaminophen, from common to rare, for consumers and healthcare professionals.

### *Acetaminophen Patient Tips: 7 things you should know*

Nov 28, 2024 · Easy-to-read patient tips for acetaminophen covering how it works, benefits, risks, and best practices.

### *Paracetamol Uses, Dosage, Side Effects, Warnings - Drugs.com*

Mar 25, 2025 · Paracetamol (Panadol, Calpol, Alvedon) is a widely used over-the-counter painkiller and fever reducer. It is also known as acetaminophen (Tylenol). Learn more.

### Acetaminophen vs Ibuprofen: Which is better? - Drugs.com

Oct 16, 2024 · Acetaminophen and ibuprofen are both used for pain relief but which one is more effective and which one has fewer side effects? Acetaminophen is only effective at relieving ...

## **Is it safe to take acetaminophen every day? - Drugs.com**

Dec 27, 2024 · Yes, it is safe to take Advil (ibuprofen) and Tylenol (acetaminophen) together if you need to for extra pain relief, such as for a dental extraction. This combination is more ...

## **Is acetaminophen the same as Tylenol? - Drugs.com**

Oct 16, 2024 · Yes, acetaminophen is the same as Tylenol. Acetaminophen is the generic name for the brand name medication Tylenol, made by McNeil Consumer. Acetaminophen is a pain ...

### *Acetaminophen Overdose: Symptoms & Treatment Options*

Jun 30, 2025 · What you need to know about an Acetaminophen overdose including: what causes an overdose, signs and symptoms to look out for, and the treatment options.

## **Acetaminophen Uses, Dosage & Side Effects - Drugs.com**

Aug 6, 2023 · Acetaminophen is a widely used pain reliever and fever reducer for conditions like headaches, arthritis, colds, and flu, available OTC and in ...

## **Acetaminophen Dosage Guide + Max Dose, Adjustments - Dru...**

Jan 16, 2024 · Detailed Acetaminophen dosage information for adults and children. Includes dosages for Pain ...

## **Tylenol: Uses, Dosage, Side Effects, Warnings - Drugs.com**

Feb 29, 2024 · Tylenol is a pain reliever and a fever reducer used to treat many conditions such as headaches, ...

## **Acetaminophen Side Effects: Common, Severe, Long Term**

Jun 17, 2025 · Learn about the side effects of acetaminophen, from common to rare, for consumers and ...

### **Acetaminophen Patient Tips: 7 things you should know**

Nov 28, 2024 · Easy-to-read patient tips for acetaminophen covering how it works, benefits, risks, and best ...

Explore the comprehensive insights on acetaminophen in the Davis Drug Guide. Learn more about

its uses

[Back to Home](#)